Medical Facilities Available in Rural Areas of the State

Report of the
Virginia Advisory Legislative Council
to
The Governor
and
The General Assembly
of Virginia

SENATE DOCUMENT No. 6

COMMONWEALTH OF VIRGINIA
DIVISION OF PURCHASE AND PRINTING
1945

Medical Facilities Available in Rural Areas of the State

Report of the
Virginia Advisory Legislative Council
to
The Governor
and
The General Assembly
of Virginia

SENATE DOCUMENT No. 6

COMMONWEALTH OF VIRGINIA
DIVISION OF PURCHASE AND PRINTING
1945

MEMBERS OF THE COUNCIL

EDWARD L. BREEDEN, JR., *Chairman*

EDWARD O. MCCUE, JR., *Vice-Chairman*

WILLIS E. COHOON

CHARLES R. FENWICK

GARLAND GRAY

E. GLENN JORDAN

E. BLACKBURN MOORE

JOHN B. SPIERS

ROBERT C. VADEN

CASSIUS M. CHICHESTER, *Secretary*

JOHN B. BOATWRIGHT, JR., *Recording Secretary*

Medical Facilities Available in Rural Areas of the State

A Report
of the
Virginia Advisory Legislative Council

RICHMOND, VIRGINIA, NOVEMBER 12, 1945

To:
Honorable Colgate W. Darden, Jr., Governor of Virginia
and
The General Assembly of Virginia

I
INTRODUCTION

The following resolution was passed by the General Assembly of Virginia in February, 1944:

SENATE JOINT RESOLUTION NO. 16

Whereas, the medical facilities available in the rural areas is a matter of increasing concern to the State, now, therefore,

Be it resolved by the Senate of Virginia, the House of Delegates concurring, That the Virginia Advisory Legislative Council is authorized and directed to make an investigation and study of the medical facilities available to the rural population of Virginia. In its work the Council shall avail itself of the assistance of the Department of Health, and of any other Federal, State or local agency concerned with this problem. The Council shall submit to the Governor and the General Assembly at least thirty days prior to the next regular session of the General Assembly a report of its findings and recommendations, together with any proposed legislation necessary to carry its recommendations into effect. Interim reports may be made upon request of the Governor or whenever the Council deem such a report advisable.

The Council requested Charles R. Fenwick, House of Delegates, Arlington County, to serve as chairman of a committee to make the initial study and report. The following were appointed to serve with the chairman: H. B. Mulholland, M. D., Assistant Dean, University of Virginia Medical School and President, Medical Society of Virginia, University; President W. T. Sanger, Medical College of Vrginia, Rchmond; Philip S. Smith, M. D., Johnston Memorial Clinic, Vice-President, Medical Society of Virginia, Abingdon; W. E. Garnett, Ph. D., Rural Sociologist,

Virginia Agricultural Experiment Station, Virginia Polytechnic Institute, Blacksburg; J. M. Emmett, M. D., Chief Surgeon, Chesapeake and Ohio Railway Company, Clifton Forge; M. M. Long, patron of the resolution and Senator 17th Senatorial District, St. Paul; W. J. Sturgis, M. D., President, Northampton-Accomac Memorial Hospital, Nassawadox, and I. C. Riggin, M. D., State Health Commissioner, Richmond.

The Committee organized by electing Dr. Riggin Vice-Chairman. Cassius M. Chichester and John B. Boatwright, Jr., were appointed Secretary and Recording Secretary, respectively, to the Committee.

Through the courtesy of Dr. John R. Hutcheson, Acting President, V. P. I., and Dr. A. W. Drinkard, Jr., Director, Virginia Agricultural Experiment Station, Dr. W. E. Garnett, Director of the Experiment Station's Rural Health and Medical Care Study, was released to the Committee for two months, to aid in correlating the great amount of material which the Committee had in hand.

Nine meetings of the Committee and three public hearings were held. Great interest was evidenced throughout the State in the matters being studied. While there did not appear to be any hysteria the practically unanimous opinion was that if the State does not act to encourage doctors to settle in rural areas, to extend the coverage and program of health departments, to make hospitalization more readily available to the rural population, and to give increased aid in furnishing hospital, dental and medical care to the medically needy, the situation will become extremely critical. The statement presented at the Roanoke hearing by a representative of the Federation of Home Demonstration Clubs, an organization of over 25,000 rural women, is typical (Appendix I).

The members of the Committee studied the programs of several Federal agencies, the programs of other states and countries and the plans which are being advocated on every hand. Much data was accumulated and analyzed. At the inception of the study, the Committee decided that many problems were common to the rural and the urban population of the State. While the number of urban doctors in proportion to the population is large as compared with the number for the rural population, evidence of the effects of the decrease in the number of doctors is also apparent in the cities. A program which will provide more medical and dental facilities and care for the rural population must also make provision for those dwelling in and around cities. The extension of State aid for the medically needy must be made equally applicable to city and country people. In short, if a person is sick he needs medical attention whether he lives in the city or on a farm. If he is unable to pay for it, he should be assisted to obtain the needed care by public aid.

The Committee recognized that needed improvements in the State's system of medical care such as are required to insure the benefits of modern medical science to all the people will take a number of years and that only a beginning can be made at this time. The Committee realized that an adequate system of medical care will involve material increases in the expenditure of public funds. The term "medical care" is used in the broad sense to cover the services of physicians, dentists, nurses, hospitals, and public health agencies.

The Committee consulted with many experts in the field, studied the experience of hospital and medical care plans and analyzed the material before it and reported to the Council which, after careful consideration, makes the following recommendations:

II

Summary of Basic Recommendations for Immediate Action

The Council recognizes that it will take a number of years to fully develop the measures needed for insuring adequate medical facilities and care for all the people.

1. Expansion of public health services to include complete coverage of the State by local public health departments, closer relationship of preventive and curative medicine, periodic examination of all school children and teachers by doctors and increased public health service responsibility for the correction of the defects revealed by such examinations are needed. (Since it is understood that the implementation of these recommendations is being dealt with in another report, this phase of the subject will not be considered here.)

2. An expanded correlated hospital and health center system to cover the State should be provided. As a beginning in the development of such a system, it is recommended that (a) an appropriation of $20,000.00 be made for a hospital and health center survey; (b) provision be made for building six health centers at a cost of approximately $60,000.00 each with the State providing up to 75% of the cost. The cost of operation of these centers would be divided between the State and localities.

3. Development of methods of furthering the financing of essential medical care for everyone is needed. The Council recommends (a) that public funds in the amount of $803,332.00, or 30c per capita of the 1940 population, be provided for extending hospital and medical care to the medically needy, the State and localities to contribute equally to this fund, the distribution of the appropriation is the subject matter study being conducted by a commission and this subject is left to the report of that commission; (b) prepayment plans for hospital, surgical and medical care should be fostered and encouraged in every way possible by all public agencies. Since reliable actuarial figures on insurance for medical and dental care insurance other than hospital, surgical and physicians care within hospitals, is lacking for rural people, and since such insurance is of great public importance, it is recommended that further study be given this matter.

4. To help to increase the supply of rural doctors, it is recommended that an appropriation of $25,000.00 a year be made to each of the two State Medical Schools for creating loan funds for medical students, to be accompanied by a pledge of stipulated service in rural areas.

5. It is recommended that hospitals and nursing homes be licensed by the State Department of Health.

6. The sum of $9,500 should be appropriated to the State Board of

Health to provide a consultant on hospital location and planning, with necessary office assistance and travel allowance.

7. The State should create a revolving hospital and health center construction and equipment loan fund of not less than $2,000,000 nor more than $5,000,000; that this fund be derived either from the general fund of the State or from funds to be invested by the State; that from this fund loans be made for the construction and equipment of local hospitals and health centers not to exceed 45% of the total cost of construction and equipment; not including the site used for the hospital or health center, and not to exceed a total of $125,000 as a loan on any individual project; that this revolving fund be administered by a board composed of the State Commissioner of Health, State Treasurer, State Commissioner of Public Welfare, Superintendent of Public Instruction, Director of the State Planning Board, and the Governor, ex-officio; that loans be made only on projects previously approved with the cooperation of the State hospital consultant under conditions of amortization and other requirements that may be laid down by the board provided for above; that the interests rate currently be 2%; that loans be made only to local hospital or health center boards that are self-perpetuating, are duly incorporated, have recognized local standing, and have on them at least one representative of the local government, such as chairman of the board of supervisors, or the treasurer of the county or city; and that there be vested in the board making local hospital and health center loans, full authority to protect the State in the discharge of its duties.

8. It is recommended that the whole problem of medical facilities and care and the promotion of needed measures in this field be studied further by a commission; such a study would be conducted in cooperation with but be more inclusive than the study recommended to be made under item No. 2 above.

III

The Medical Care Situation in Rural Virginia

The recommendations designed to improve medical care are justified by many conditions and trends, especially as they affect rural people. This phase of the problem has been set forth in some detail in *The Health and Medical Care Situation in Rural Virginia,* Va. Agr. Exp. Sta. Bulletin 363, and *Rural Medical Care on the March,* V. P. I. Bulletin Vol. XXXVIII, No. 4, which are available on request.

Doctor Shortage and Maldistribution

In hearings on Wartime Health and Education conducted by a Congressional Committee, it was reported that 33.9 per cent of Virginia counties with 25.8 percent of the State's population had over 3,000 people per active physician on January 1, 1944, as compared to 15 percent of the counties with 7.5 percent of the population in 1940. "The standard of adequacy usually used by the American Medical Association and the U. S. Public Health Service is 1500 people per physician, whereas anything beyond 3,000 people per physician is usually considered

critical."[1] In 1944, according to the same report, the following counties had no active physician:[2]

County	*Population*
Cumberland	7,505
King George	5,431
King William	7,855
Mathews	7,149
Middlesex	6,673
Powhatan	5.671

In the light of such standards, the following figures are significant:

Virginia Counties with 5,000 to 10,000 population per active physician, 1940 and 1944

County	*Ratio of Population to active physician*
1940	
Chesterfield	6,237
Greene	5,218
King and Queen	6.954
Richmond	6,634
1944	
Bland	6,047
Brunswick	6,159
Fairfax	5.897
Floyd	5,313
Halifax	5,207
King and Queen	5.939
Mecklenburg	5,736
Princess Anne	6,473
Stafford	8,739
York	5,284

Virginia Counties with over 10,000 population per active physician, 1944

County	*Ratio of Population to active physician*
Carroll	21,552
Franklin	21,624

In the past three years, over 800 or more than one-third[3] of the 2,187 physicians said to have been in active practice in Virginia in 1941,[4] have

[1]Hearings on Wartime Health and Education pursuant S. Res. 74, page 2121.

[2]Ibid. page 2122 (Varying conditions such as nearness to doctors in another county, or in a nearby city, or accessibility to a hospital, must be taken into account when judging physician population ratios).

[3]Files of Dr. H. H. Trout, Jefferson Hospital, Roanoke, Chairman Va. Physicians Procurement and Assignment Committee.

[4]Estimates of Dr. George M. Lawson, University of Virginia Medical School; based on 1942 A. M. A. Directory.

been taken by the armed forces or have died, many succumbing to the strain of overwork. Before the physician losses of the war period there was for the State as a whole, one active physician to approximately 1,225 people. This would have been a good ratio if the doctors were well distributed. However, according to a table compiled by the State Department of Health in May, 1941, there was then a ratio of one doctor in general practice to approximately one thousand people in the cities, as compared to a ratio of approximately one to 2,000 people in rural areas (the term "rural" as used in these Health Department ratios, included places up to 10,000 population). This is a situation not peculiar to Virginia. The figures for the few counties represented in the following Table are typical of trends in regard to physicians in rural areas. Furthermore, in 1941, 32 percent of the rural doctors were over 60 years of age, as compared to 23 per cent of the urban doctors.[1]

For further information as to Virginia's rank in medical care see Appendix Table 1.

Table—Comparative changes in the number of physicians and persons per physician in Charlottesville city and nearby counties during the 57-year period, 1886-1943

Place	Physicians				Persons per physician			
	1886	1943	Percent change 1886-1943		1886	1943	Percent change 1886-1943	
			Gain	Loss			Gain	Loss
Charlottesville city	15	41	173	0	373	473	27	0
Charlottesville city and Albemarle county combined	48	48	0	0	791	917	16	0
Albemarle county	33	7	0	79	812	3,522	334	0
Buckingham county	17	4	0	76	846	3,349	296	0
Fluvanna county	14	4	0	71	679	1,772	161	0
Greene county	12	1	0	92	468	5,218	1,015	0
Louisa county	16	4	0	75	1,062	3,416	222	0
Madison county	16	5	0	69	639	1,693	165	0
Nelson county	25	6	0	76	613	2,707	342	0
Orange county	21	6	0	71	610	2,108	246	0
Total	169	78	—	—	—	——	—	0
Average	—	—	—	54	694	1,548	123	0

Source: Compilations of Dr. George M. Lawson, University of Virginia Medical School and the U. S. Census of Population for 1890 and 1940. (NOTE: Charlottesville physicians serve adjacent areas in Albemarle county; also the University Hospital established since 1886. In 1945, there were only 6 actively practising physicians in Albemarle, 2 in Buckingham, 3 in Fluvanna, 1 in Greene, 4 in Louisa, 2 in Madison, 8 in Nelson and 4 in Orange.)

[1]1942 Medical Directory

The Virginia dentist situation is as critical as that for physicians. On the basis of a report of the Virginia Dental Association in February, 1944, for the State as a whole, there were 3,760 persons per dentist—urban 2,085, rural, 6,691. These ratios, like those for physicians, varied markedly in different regions of the State.

The Inadequacy of Rural Medical and Dental Care

In the last half century, medical and dental science have made rapid progress. However rural people are receiving less benefit from this progress than the urban population. Some of the evidences of inadequate medical and dental care for the rural population are:

1. *Results of the Selective Service Medical Examinations.*—The Selective Service medical examinations of Virgnia men who were called between July, 1942 and January, 1944, show a rejecton rate of 42.1 per cent for the white, and 50.3 per cent for the Negro, or a combined rejection rate of 45.6 per cent, including rejections on the grounds of mental and emotional instability and illiteracy.[1] This was 6.4 per cent above the national average. *Forty-two states made a better showing than Virginia.* The percentage of rejection for rural boys was higher than for the urban boys.

A report on 1,138 youths who had been reared in North Carolina orphanages show only 16 rejected, or a rate of 1.4 per cent. Incomplete reports from Virginia orphanages give practically the same picture as North Carolina. The better showing of the orphanage youth is attributed to better medical care—regular medical examination and correction of defects with properly balanced diets and regular habits. With 734 defects per 1,000 men, Virginia was among the three states with the highest rate of total defects in the 20-odd points covered by the medical examinations of World War I. It was among the six highest for 13 types of defects.[2] Apparently Virginia did not take the lessons of the medical examinations of the first World War seriously.

2. *Physical Inspection of School Children.*—Testimony before a Congressional committee shows a high correlation between physical defects found among school youth and Selective Service rejections. Therefore, the results of physical inspections of Virginia school children by the teachers are of interest.

In 1941-42, approximately 23 per cent of the white rural youth had a five-point rating, that is, met the standard set for teeth, vision, hearing, throat, and weight, as compared to 35 per cent of the city youth.[3]

A wide variation between the percentage of children with physical defects and the percentage with defects corrected is found among the counties (Appendix, Table 2). The information given in Table 2 clearly shows the need for an expanded school health program, including periodic examinations of the school children by a physician, and a definite respons-

[1]Data from office of Virginia Director of Selective Service.
[2]Scientific Monthly, Vol. 10, 1920, page 135.
[3]Percentages based on 1941-42 report of the State Department of Education.

ibility on the part of the local health department for correction of the defects found.

3. *Maternity Care.*—The service rendered in maternal cases is another index of the adequacy of medical facilities. In 1941, there were 42,330 maternity cases in rural Virginia. Among these births, only three out of four had the attention of a physician. Only one mother in four had hospital care at the time of birth. Among these rural births, approximately 12% in the white race occurred without the attendance of a physician, and a little more than 66% among the Negro. Hospital care was received by one in three of the white births and by one in fifteen of the Negro.

On the other hand, in the cities, approximately only one in 100 of the white mothers, and one in three of the Negro mothers, were without medical attendance at birth. A litle over three out of four of the urban white births, and nearly one in three of the Negro births, occurred in hospitals.

A wide variation in medical care of maternal cases is seen among the counties, (Appendix, Table 3).[1]

Since August, 1943, when Federal allotments were first made for the medical care of wives of soldiers in the four lowest pay grades, there has been a decided increase in the number of maternity cases receving medical and hospital care.

4. *Medical Examinations of Virginia F.S.A. Clients.*—Still further evidence of the need of more adequate rural medical care is indicated by the results of physicians' examinations of Farm Security Administration clients. Medical examinaton of each member of 84 families consisting of 330 individuals, all in one county, shows an average of approximately 3½ defects or conditions per family needing attention.

Records of 6,315 clients of the Farm Security Administration in 1937 show 43 per cent as being unable to get needed medical care without payment being guaranteed by someone, and nine per cent claimed not to have had hospital care when needed. Forty-two per cent of the mothers, or 1,392, were said to be in need of medical attention at the time of the report.

5. *Reports of Competent Observers.*—Dr. Louis S. Reed, of the U. S. Public Health Service, in a study of the medical care situation in six Virginia counties and two cities, says:

"A sizable proportion of Virginia's population fails to receive adequate medical care, and a large proportion is unable to pay for needed medical services, at least under prevailing methods of payment. In many areas little free service is available. Therefore, many go without needed care. The situation is more serious in rural than in urban areas because the rural population, by and large, has lower incomes. Less free service is available in rural areas, and many rural areas lack the facilities—the physicians and hospitals—necessary for provision of care.

"In all places surveyed, virtually all groups interviewed stressed

[1]Special report of the Farm Security Administration.

the seriousness of the situation with regard to hospital care; that people of low income often do not have or cannot raise the money to pay for hospital care when the need arises; that the hospitals either refuse free care or can accept only a limited number of such cases; that public funds to pay for such care are generally either non-existent or inadequate; and that consequently many are unable to obtain urgently needed care.

"It was also stressed that even people in moderate financial circumstances often find it difficult to pay a large hospital bill. Physicians in all the areas surveyed stated that substantial portions of their patients cannot pay for hospital care, and that they frequently are unable to obtain care for such patients.

"From interviews with those in a position to observe, it appears that in the rural areas, at least, a substantial part of the population have accommodated themselves to meagre medical attention. They are not used to consulting a physician except in emergencies. Having never experienced adequate medical care, they do not miss what they have never had. In many of the rural areas, not only the quantity, but also the quality of service is deficient."[1]

To Dr. Reed's observations as to the inadequacy of rural medical care may be added the testimony obtained in the 1941 Virginia Rural Health and Medical Care Survey. This survey included interviews with hospital directors, public health and welfare workers, rural physicians, and hundreds of rural families.

Consequences of Inadequate Medical Care

The greatest penalty of inadequate medical care is paid in the suffering and untimely deaths caused by preventible illness. In many cases suffering includes a large amount of chronic illness involving, to a greater or lesser extent, economic loss and various social complications. Much of the poverty affecting Virginia's rural population can be traced to illness which, in turn, is based to some extent upon inadequate medical care.

1. *Loss of time.*—Records kept by 984 Virginia rural families in 1941 show 29 per cent as having had members sick in bed 15 or more days, and 25 per cent with members incapacitated to some extent for 15 or more days, but not in bed. National studies indicate an average loss of seven days per year per employee.[2]

Approximately 140,000 Virginia people are sick each day, involving loss of time estimated at $30,000,000 per year.[3] At least one-fifth of this sickness is believed to be preventable. Adequate medical care will cost a lot, but its lack costs even more.

2. *Untimely deaths.*—While advances in medicine and treatment of diseases have resulted in a progressive reduction in death rates as a whole,

[1]Reed, Louis S., Medical Needs in Virginia, unpublished report of the U. S. Public Health Service.

[2]Falk, I. G., American Journal of Public Health, Vol. 34, No. 12, December 1944.

[3]Senate Committee on Health and Education, Interim Rept., January 1945, p. 5.

the rates for some diseases are still unnecessarily high. The death rate in many rural areas is higher than the urban.[1] In 1941, the rural death rate for children under one year of age, per 1,000 live births, was 60, or five points higher than the urban rate. In 1941, 31 states had a lower infant death rate than Virginia. The infant death rate, in Virginia, is highest in the areas where doctors are fewest and farm incomes lowest.

3. *Chronic illness.*—Approximately one-half of 2,400 widely distributed rural families covered in the Virginia Rural Health and Medical Care Survey, 1941, reported one or more members with chronic ailments of some type. Chronic ailments, which greatly lessen work efficiency, were reported much more frequently among the poorer white and Negro families than among families with good incomes. Those with cash incomes of $500 or less reported about one-third smaller average annual expenditures for medical care than those with incomes of more than $500. Interviews with doctors, superintendents of hospitals and directors of clinics, indicate that many of the chronic ailments of poor people can be traced to the lack of adequate medical care when needed. A number of national studies give approximately the same picture—the lower income groups paying less for medical care in the face of a greater need with a larger proportion of chronic illness.

The Cost of Medical Care in Relation to Farm Income

According to the June, 1943, issue of Current Business, a publication of the U. S. Department of Commerce, the average 1939 net cash farm income of Virginia farm operators was $463; in normal times, the average annual income of approximately 50,000 families, who live on farm wages, was even less.

In 1939, three farm operators in eight had some additional earnings from non-farm work. In 1940, the gross farm income of the Virginia farm population was approximately $180 per capita as compared to an income of approximately $640 per capita of the non-farm population. Gross farm income includes home produced supplies to the average value of $252 per farm in 1939 and the expense of farm operation. In 1939, approximately one Virginia farm operator in three had a gross farm income of less than $600. Average farm incomes, as well as returns from non-farm work, have increased greatly since 1939, but the cost of living and farm operation have also increased.

It is estimated that "The low output Virginia farm operators in 1945, numbered around 65,000 and have annual cash sales, at 1945 prices, averaging around $700, or about double the 1939 average of approximately $350." Prices of everything purchased by such families are also much higher than in 1939. For a complete picture of the low-income rural population, about 50,000 farm wage laborer families and a large number of non-farm rural families, must be added to the low output farm operators. Appendix Table 4

[1] 1941-42 report of the State Department of Health.

In 1941, reports of approximately 2,400 Virginia rural families give an average expenditure of $60 per year per family for all types of medical care. This is closely in line with several nationwide studies.

About one-sixth of these families had medical care bills of more than $100 per year, while nine-tenths of the families had some expense for medical care during the year.

For the country as a whole approximately one person in 10 is reported as having hospital treatment each year; one-half of the hospital admissions are for surgery. Available figures indicate that the farm people of Virginia are below the national average in both the use of hospital facilities and hospital expenditures.

Distances from a doctor or hospital adds to the cost and difficulty of rural people getting adequate medical care. In 1941, reports of 894 rural Virginia families show that 52 per cent live more than five miles from a doctor, and 21 per cent live ten miles or more; 47 per cent of those living five miles or more from a doctor were charged $5.00 for a day visit, while those living within a five-mile zone were charged $3.00 a visit. Families living longer distances from doctors were reported having to pay from $5.00 to $15.00 or even more, for a day visit.

The results of national medical care studies in 1941 are shown graphically in the accompanying charts. The medium income for farm families is $760 and for urban families $1,857. The average annual expenditures for medical care for farm families of all income groups in 1941 was $60 per family. Those with incomes under $500 spend only about one-eighth as much for medical care as those with incomes of from $3,000 to $5,000. (See Appendix Charts I and II.)

Aside from humanitarian considerations, adequate medical care within the financial reach of rural people is a matter of concern to urban centers as well as to country folk themselves.

The country is a population seed bed from which cities must be constantly replenished. The good health of workers from rural areas should be a matter of great interest to industrial concerns.

According to an inquiry made in 1941 by the Experiment Station the cost of medical care is greatly out of proportion to the income of farm people. The same study shows that many doctors in rural areas do not have large professional incomes.

Net professional income of 231 rural doctors by income groups and years practicing, as reported for 1941 income taxes.

	Reporting		Years Practicing		
Income Groups	*Number*	*Percent*	*Under 10*	*11-29*	*Over 30*
Under $1500	48	20.8	4	10	34
$1500 - 2999	70	30.3	14	21	14
3000 - 4999	50	31.6	12	16	37
5000 - 6999	34	14.7	4	18	11
7000 and over	29	12.5	7	11	7
	231		41	76	103

IV

Health Centers

In this report, it has been shown that even before so many physicians joined the armed forces, a long-standing dearth of doctors existed in the rural areas. Those remaining were in the older age group and the younger recent graduates almost invariably settled in urban practice. This appalling lack of adequate medical care in country districts is recognized by both medical authorities and the laity, as evidenced by the discussion about the subject carried on in political and medical circles during recent years. The lack of adequate medical care and facilities in the rural areas is of immediate and fundamental importance.

What are the existing reasons for the flow of doctors into the cities, leaving the rural areas without sufficient medical care? Many factors play a part in this situation. Of primary importance is the fact that medical education has undergone radical changes in the past twenty-five years or more and, that young doctors are now trained to utilize to the fullest laboratory and other facilities which are not now available in the country districts because of the expense of purchase and maintenance, the lack of time to perform tests, and the absence of technical help to aid in making the various tests. The stimulus to the use of such facilities, even if they were on the spot, must come from intellectual contact with one's medical colleagues, which is impossible with the pressure and isolation experienced in practicing medicine in the country today. Financial return must too play a part, for the education of a doctor is a long and costly affair, and the city practice is more remunerative under present conditions. The social welfare of the population as a whole is inseparable from this problem and where the basic income is greater, better medical care is invariably present. In a hearing before Congress on the Hill-Burton Bill, S-191, Senator Pepper gave the following figures:

No. of Families	Per cent of U. S. Population	Average amt. of income per year	Total amt. spent on medical care per year	Per cent of income
6,900,000	21%	Less than $1000	$ 42	6.8%
9,800,000	29%	$1000 to $2000	$ 68	4.5%
6,800,000	20%	$2000 to $3000	$ 96	3.9%
6,700,000	20%	$3000 to $5000	$143	3.7%
3,300,000	10%	$5000 or more	$241	2.4%

Ninety-four per cent of the total United States population earns less than $5,000 per year. Some doctors move to the city when their children come of school age because of poor educational opportunities in the rural areas. Analysis of the plans of 60,000 doctors in the armed forces show that only 12% indicate a desire to return to rural practice and most of these will only go to the country if hospital facilities and opportunities for group practice are available. This number, 12%, will only scratch

the surface of solving the problem, so we must look elsewhere for the solution.

Before our present era of war prosperity, 33% of the population received free medical care of one sort or another, according to Dr. Thomas Parran, Surgeon General of the Public Health Service.

Elsewhere in this report it is shown that (a) facilities must be provided for adequate care and (b) that coincidentally plans must be made to assist the medically needy.

Solutions:

Adequate medical facilities and personnel are fudamental. All are agreed upon this fact. Provision of these must go hand in hand with preventive medicine and the development of health departments for all of the State. Establishment of so-called "health centers" which will provide public health facilities combined with curative medicine is in our opinion of primary importance and should be the first move in any overall plan.

In such centers, there should be provision for doctors' and dentists' offices, technical personnel, clinic rooms and a small x-ray unit. A few beds must be provided in these units, ten to fifteen in the smaller, so that certain patients and obstetrical cases can be handled efficiently.

It is estimated that approximately fifty health centers should ultimately be provided for the State of Virginia, the location of which to be decided upon after a comprehensive survey. Studies have been made by the United States Public Health Service and three general types of centers were developed as a result:

Type A, to serve a population under 30,000, type B, to serve a population of 30,000 to 60,000 and type C, to serve a population of 100,000 or more. In the original plans developed by the United States Public Health Service no provision was made for doctors' and dentists' offices and patients' beds. We think these are essential in most instances and should be an integral part of the plan. While many of these structures may be isolated, it is recognized that some may be built in connection with adjacent existing hospital facilities. The Council recommends the immediate establishment of six units costing about $60,000 each, estimated on the basis of current costs either type A or B, in areas to be selected. We feel that these should be planned and begun even before a state-wide survey for overall need of health centers and hospitals can be completed.

The Council recommends that such a survey, which will also include the need for hospital beds, be immediately instituted and an appropriation of $15,000 in this biennium be made for this purpose. The Council believes that Federal aid will be forthcoming in the future for these projects but they feel that a start must be made now to enable the State to efficiently take full advantage of this aid.

The administrative control of such units must perforce be under some agency and that should be, in the opinion of the Council, the State Department of Health. However, because of the scope of the serv-

ice rendered, an advisory council should be set up for each center composed of the local health board, (chairman of the board of supervisors, secretary of this board, a dentist and a physician and, in addition, membership from the local medical society, local welfare representative and prominent citizens). The local responsibility must be developed to the utmost.

The decisions regarding the practice of medicine in these centers and matters regarding medical ethics, etc., should be discussed and decided by a State Advisory Committee on Medical Practice, composed of ten members, of whom nine would be appointed by the Governor. The State Medical Society should submit at least three nominations for each position on the Committee but the Governor would not be limited in his appoinments to such nominations; the Governor would, however, be required to appoint a member from each Congressional District, and the State Health Commissioner would be an ex-officio member of the Committee with full right of voting and participation in the decisions of the Committee. Initial appointments would be made as follows: three members would be appointed for terms of one year, three for terms of two years and three for terms of three years. At the expiration of such appointments their successors would be appointed for terms of three years. No member would be eligible to succeed himself for more than one term (initial appointments would not be counted as terms when the Committee is first established) without a lapse of at least three years between terms.

The cost of construction of these health centers should be on the basis of not more than seventy-five per cent appropriated by the State and not less than twenty-five per cent by the local area served. The cost of maintenance of these centers should be divided between the State Health Department and the area served, which would support certain facilities, laboratory, technical help, health officers, public health nurse, etc.

V

Facilities for Medical Service and Practice

Two-Fold Purpose of Medical Facilities.—Hospitals, medical centers, and diagnostic laboratories serve two fundamental purposes: (1) the administration of preventive and curative medicine in all of its branches for the welfare of the general public, and (2) attraction and continuance of able practitioners of medicine and health authorities required to assure high class services. The average layman hardly realizes that medical facilities have become the *sine qua non* of medical practice both preventive and curative. He is likely to think of a hospital, for example, as a place to secure treatment when he is ill, forgetting that this type of "work shop" is just as essential to the physician as a university laboratory is to the scientist or a school building to the teacher. As the physician of the older day, practicing in rural communities, passes away, which unfortunately we note on every side, there are few doctors to take their

places because current medical education and practice presuppose certain facilities which must be made available. This means that no rural state like Virginia can solve its rural medical care problem merely by multiplying the graduates of its medical schools.

To assure physicians and allied health personnel these essentials must be provided: (1) Facilities for practice such as diagnostic laboratories and hospitals of varying size and scope as local conditions require, as mentioned above; (2) opportunities for association with other practitioners and auxiliary personnel to supplement their own interests and abilities; (3) reasonable economic returns; (4) desirable living conditions as will make for rearing a family in proximity to good schools, churches, and other cultural influences.

Virginia Lacks Medical Facilities.—Inasmuch as the requirements of the State in health centers will be discussed elsewhere in this report this section will be limited to a discussion of Virginia's requirements in hospital beds.

In 1940 the United States was reported as having almost 3.9 hospital beds per 1000 population, not including beds for mental disorders, tuberculosis, communicable diseases, or convalescents. This falls short of the current standard set, 4.5 per 1000 population. At the same time Virginia was said to have 3.1 hospital beds, ranking thirty-third in the nation, but it must be borne in mind that the distribution of hospital beds is also an important consideration. Many cities of our country and nine states have reached the standard of 4.5 beds per 1000 population but in no rural state like Virginia are hospital beds made available within reasonable distance, 25 to 40 miles, of most citizens. With better roads and better transportation this distance may have to be extended in considering making hospital beds reasonably available. Sixty-three of our rural counties recently studied by the Farm Security Administration showed an average of 1.1 beds per 1000 rural population. From this it can be seen that much remains to be done in supplying hospital beds for our total population; on the other hand it must be remembered that if the standard of 4.5 beds per 1000 population is a reasonable one it can hardly be expected, or even wise, to make this number available within all rural districts, because inevitably many rural people patronize city hospitals, and to that extent as far as hospitals go they cease to be rural. The very complexity of this situation suggests that the location of hospitals is a complicated matter, requiring the most careful study.

Providing for Organized Hospital Systems by Regions.—The complexities of modern medicine as stated are such that the young graduate can no longer establish himself at the crossroads and work in isolation; nor can diagnostic centers and community hospitals be expected for long to perform their functions as they should in isolation. The time is fast approaching when the smaller hospitals will also seek association with other larger hospitals for the assistance which they can give. Leaders in this field today emphasize that medical facilities from the smallest to the

largest units must for maximal results be organized into systems with a medical center or "base hospital" at the center of each, with strategically located community hospitals and health centers, organized like a solar system. See plan on following page. The purpose of this organization is not merely to provide for easy referral of difficult or complicated cases from the smaller to the larger institution but equally important to provide consulting service, both laboratory and clinical, working out from the center to the circumference of the organization, to afford on an itinerant basis what the small communities lack and at the same time make possible a continuation education program both in the field and at the central institution of the system. This educational program is as much the heart of the regional hospital organization as any of its many other features, including large economies through joint purchasing.

Developing a hospital system for a Commonwealth like Virginia will take time but unless Virginia can take initial steps now in providing local hospital facilities and can properly organize them, inevitably our rural population will be left without medical care. Ultimately Virginia should probably have three hospital regions: One, roughly defined as covering Southwest Virginia, one organized with the University of Virginia medical school and hospital as its center, and one organized around the Medical College of Virginia. In working out any such plan all local hospitals, whether non-profit community organizations or private institutions, must be taken into consideration.

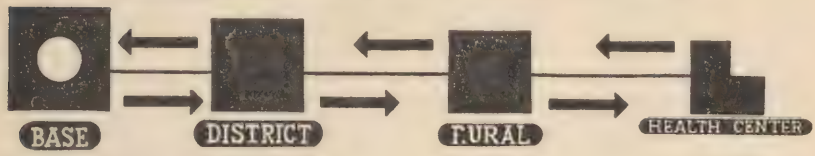
Health like education is close to the hearts of our people and hospitals like schools will in time come largely under the control of local lay boards, supplemented by medical advisory committees. The physician should no longer be expected to provide his hospital any more than the teacher is expected to provide his school building; these are local responsibilities with such help as may come from State and Federal governments.

In many respects hospital development, though considerably later, parallels our school development. We should be able to avoid the mistakes of the latter in establishing community hospitals. Their size and distribution must be accurately related to the population groups which will use them; a fifty-bed hospital, for example, designed to add fifty more beds, should be located in a trading center with a population of 50,000 within a radius of thirty-five miles. Patients can be transported by ambulance, or otherwise, if necessary, not unlike school children are transported, but of course in less numbers. Some states have developed a regular ambulance system controlled by its chief medical center. Hospital development most naturally occurs near the larger consolidated schools and other public undertakings of widespread interest to our people. Important State and local activities should be planned on the basis of functional association.

Hospitals have long appealed to the generous as suitable memorial structures and activities. Following the greatest war in history communities will be considering proper war memorials. Already a trend towards planning living memorials is evident. The question naturally

Coordinated Hospital Service Plan

Plan provides for constant exchange between hospitals of information, training, and consultation service, and personnel, and for referral of patients when indicated. The health centers may vary in size and scope of service offered.



Teaching Research Consultation

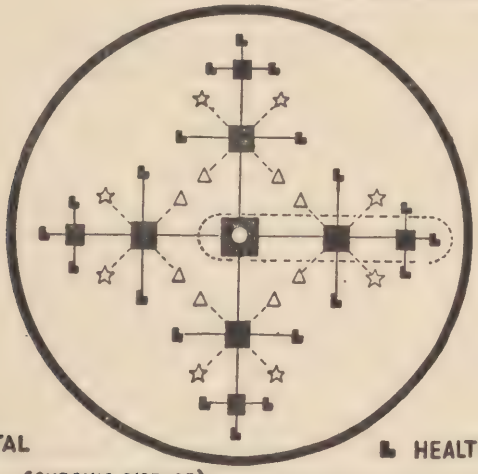
CANCER CLINIC
PSYCHIATRIC SERVICE
HEART CLINIC
MAJOR SURGERY
INTERNAL MEDICINE
OBSTETRICS
PEDIATRICS
ORTHOPEDIC SURGERY
COMMUNICABLE DISEASES
TUBERCULOSIS
VENEREAL DISEASE
TEACHING
NURSES
INTERNS
RESIDENTS
POST-GRADUATES
LABORATORY
X-RAY
PATHOLOGY
BACTERIOLOGY
CHEMICAL
PHYSIOTHERAPY
DENTISTRY
EYE, EAR, NOSE, THROAT
DIETETICS

MAJOR SURGERY
OBSTETRICS
INTERNAL MEDICINE
COMMUNICABLE DISEASES
TUBERCULOSIS
VENEREAL DISEASE
ETHER
PEDIATRICS
EYE, EAR, NOSE, THROAT
DENTISTRY
PHYSIOTHERAPY
LABORATORY
X-RAY
PATHOLOGY
BACTERIOLOGY
CHEMICAL
TEACHING
NURSES
INTERNS
DIETETICS

INTERNAL MEDICINE
OBSTETRICS
EYE, EAR, NOSE, THROAT
DENTISTRY
MINOR SURGERY
LABORATORY
X-RAY
BACTERIOLOGY

OBSTETRICS
EMERGENCY MEDICAL AND SURGERY
LABORATORY
X-RAY
BACTERIOLOGY
DENTISTRY
PRIVATE OFFICE OR OFFICES FOR PRIVATE PHYSICIANS
ADMINISTRATIVE PUBLIC HEALTH OFFICES
HEALTH OFFICER
SANITARIAN
PUBLIC HEALTH NURSES
PUBLIC HEALTH CLINICS
MATERNAL AND CHILD HEALTH
TUBERCULOSIS
VENEREAL DISEASE
PUBLIC HEALTH EDUCATION

PLAN DRAFTED BY THE U. S. PUBLIC HEALTH SERVICE.



■ HOSPITAL
☆ INSTITUTION (CHRONIC DISEASE)
▙ HEALTH CENTER
△ NURSING HOME (CHRONIC DISEASE)

A Coordinated Hospital Health Plan A Necessity in the Practice of Modern Medicine

arises as to whether a more really useful living memorial could be found than a hospital or a health center. Their construction should be widely encouraged but in doing so care must be exercised to prevent the great hazard of wrongly placed and oversized service units. Misdirected local pride and patriotism can often easily enough make buildings available without adequate resources for operation. Planning and locating a hospital is work for experts, requiring exacting surveys. The hospital site as well as the building itself call for the work of specialists; unfortunately, their number is limited at this time. On that account and to secure the best return for funds spent the State should provide this service through the State Health Department.

Future Pattern of Medical Practice.—The trends of medical practice today definitely indicate that tomorrow a much smaller percentage of medical care will be delivered to the homes of the sick, a consideration to be properly weighed in planning better health service for our people. When those who live in the country require medical service except when desperately ill, they increasingly will seek this in a doctor's office, often located in or near a medical center or community hospital. If bed care is required that will be taken care of locally as far as possible. If no hospitalization is recommended the patient will be seen subsequently in the doctor's office. There are communities now in this country where the public has been trained to go to a community hospital for service either as an outpatient or as an inpatient with only occasional home calls to meet emergencies. This involves proximity, good transportation, good physical facilities and good personnel. When the patient travels more, not infrequently when he goes to town on business, and the physician travels less the community can get along with fewer physicians.

Another trend of our time which is likely to assume even more rapid tempo after the war is the practice of doctors, dentists, and technical personnel to associate themselves in groups, frequently in or near hospitals, with advantage both to the patient and to the practitioner. Many practitioners in the armed services have had the very kind of experience which has deepened their convictions about the wisdom of group practice and not a few have indicated that they will never return to individual practice again. There are many who believe that the acceleration of this type of practice will be hastened as a result of the war far beyond what could have otherwise been expected.

It should be pointed out that Virginia in common with other states has sparsely settled or isolated communities to which the delivery of medical services needed can never be expected unless the physicians serving them are given a subsidy by the State or by a corporation for whom the potential patients of the area may work. This has to be borne in mind in any over-all plan of medical care. Such communities cannot support local hospitals and some of them may be even inaccessible to health centers for they, too, must be located strategically.

VI

The Supply of Rural Doctors

One of the most alarming trends in recent years as regards the medical care situation is the steady decrease in the number of doctors in rural areas and, as pointed out elsewhere in this report while the number has decreased the average age of those in rural practice has increased greatly. One of the causes for this has been the lack of proper local facilities needed by these doctors to engage in the practice of medicine. The recommendation as to establishing rural health centers will supply the facilities but some method is needed to foster the location of doctors in rural areas.

In 1942 the General Assembly of Virginia passed an act (Acts 1942, p. 531) authorizing the two medical schools to establish four annual medical scholarships in each school. These scholarships were to be granted to residents of Virginia who would contract to engage in the practice of medicine in a rural community in the State, selected by the State Health Commissioner with the approval of the State Board of Health, for a period of years equal in number to the years that such person was the beneficiary of such a scholarship; a year's internship in a rural hospital under certain conditions was considered the equivalent of a year's practice of medicine in a rural community. $2200 a year was appropriated to each of the two medical schools for such scholarships; the value of the scholarships was $550 each. Due to the war and the program of the armed forces, which placed all able-bodied medical students in a training program at federal expense and required them to enter the armed forces upon their graduation, carrying out the progrem envisaged by the 1942 act has not been possible. After the close of the present war it is the opinion of the Council that the program set forth in the 1942 act should be enlarged materially.

There are many young men and women in rural areas who wish to become physicians but, due to the high cost of medical education, are not able to afford it. By granting a service scholarship under the conditions outlined the State and the public will profit materially. Some of the recipients of these scholarships, as soon as they complete their term of practice in rural areas, will move to the cities but many of them will remain in the country if the health centers recommended and additional centers are established. The program is necessarily slow but it has the merit at least of being sure. The alternatives to this method of inducing doctors to establish in rural communities are to grant a subsidy to doctors who are willing to locate in such areas or to permit the supply of rural doctors to take care of itself.

The first of these alternatives will require large outlays of public funds, close supervision on the part of the State Health Department, constant criticism that such doctors are not giving efficient service, and hostility on the part of the other doctors in the area who are not receiving a subsidy. The second alternative will mean that those persons living

outside of urban areas will receive less and less adequate medical care. In this event it is quite likely that the Federal government will step in.

The recommendation of the Council is therefore that the sum of $50,000 a year be appropriated by the General Assembly for establishment of such service scholarships. This sum will be divided equally between the two medical schools to establish these service scholarships annually under the terms of the 1942 act.

VII

Financing Medical Services

The Council is convinced that some better method of financing medical services is essential to the improvement of the medical care situation. It believes that plans to this end should be based on the following governing principles: (1) everyone, as far as able, should pay the cost of their medical care, (2) where a family is financially unable to pay for essential medical services, the cost should be borne wholly or in part by the public, thus making real the principle that everyone should receive medical and surgical care as an inherent right—not as a matter of charity, (3) public aid for medical care is a local, state and national responsibility, (4) the administration of public aid for medical care should, as far as possible, be local, (5) any program for financing medical services should be such as to encourage the medical care essential to positive health, (6) greatly extended use should be made of the insurance principle in connection with payment for medical care, (7) any plan adopted should be sufficiently flexible to be adjustable to an expanding medical care program.

The Council recognizes that proposals for improvements in the present system of financing medical services must take account of varying conditions and needs of different elements of the State's population, such as:

(1) The fairly prosperous commercial farm families and the non-farm rural families of similar status who can pay medical bills without great difficulty—approximately ½ of the rural population.

(2) The indigent rural group which is estimated by the State Department of Public Welfare to number at least 30,000 families in normal times.

(3) The low income and marginal standard of living rural group just above the indigent line, or the medically needy who pay medical and hospital bills with great difficulty and frequently go without adequate medical attention because of the cost, in normal times over 1/3 of the rural population, or approximately 150,000 families. A recent estimate made by a representative of the United States Department of Agriculture, Bureau of Agricultural Economics, places the present number of Virginia medically needy rural families at 85,000.

(4) The chronically ill or incurable cases for whom their families are not in position to properly care. Such cases are found in all groups,

but they are most numerous among the indigent and other medically needy where proper medical care has been long neglected.

(5) The urban indigent and medically needy. Urban people generally have easier access to hospitals and other medical care facilities than rural. In cities, there is better provision for aid to the medically needy. Income levels are generally higher and hospital and surgical insurance under existing plans are more common and easier to administer. Although the present report is primarily concerned with rural needs, it is not possible or desirable to entirely separate the rural and urban aspects of medical care or its financing. The medically needy urban groups are in need of further public aid as well as rural—a situation of which a comprehensive plan must take into account.

The Council also recognizes that every family not only needs to make provisions for catastrophic illness which requires expensive hospital and nursing care, but that most families also have doctors' home or office bills, the expense of drugs and dental work and frequently charges for eye examinations and glasses.

The Council believes that with a better system of financing medical care, a system which will make possible fuller use of available aids to positive health, all types of medical care expense will tend to decline. To this end it advocates the development and support of prepaid medical care plans.

Hospital insurance is available to Virginia people through Blue Cross plans, the Farmers' Health Association (F.S.A. clients only) and commercial companies. See Appendix Chart III for urban and rural participation in prepayment plans. The last two furnish surgical insurance as does the Virginia Medical Service Association which together with commercial companies also have contracts to cover physicians' hospital care. A Blue Cross Association, a non-profit organization sponsored by the American Hospital Association, was first organized in Virginia in 1936. On January 1, 1945, the five Blue Cross Associations now operating in the State had 167,939 members, or 6.1 percent of the State's population. Blue Cross Associations in the nation as a whole, have grown in seven years from a little over one-half million members to the present enrollment of over 16 million. Such phenomenal growth indicates that hospital insurance meets a very definite public need and hence should have every possible encouragement as a desirable means of financing catastrophic medical care expenses.

In Virginia most of the hospital insurance through Blue Cross plans is among urban families. In the Experiment Station survey of 2400 rural families in 1941, less than four percent of the white and one and one half percent of the Negro families, reported having hospital insurance. The Virginia (formerly the Richmond) Hospital Service Association and the Roanoke Blue Cross Association have recently begun efforts to reach rural members. It is the opinion of many students of the subject that in view of the normally low income of a high percentage of rural families, and the need of providing for the cost of other medical care needs, neither the Blue Cross plans nor commercial insurance com-

panies will reach a large proportion of rural families, probably less than half, unless they are able to furnish more complete service at a smaller cost. For instance, the Virginia Hospital Service Association contract which provides for a semi-private room and certain hospital services, costs $2.00 per month per family. The Medical-Surgical-Obstetrical Service of the Virginia Service Association also costs $2.00 per month per family. The Roanoke Blue Cross Association has a ward contract for $1.40 per month per family, with the same hospital service as the more expensive one. Several states, especially those where Blue Cross plans operate on a statewide basis, have succeeded in getting cheaper hospital insurance than the rates now prevailing in Virginia.

After reviewing the situation, the Council concludes:

a. That actuarial data is inadequate on which to base rates for some types of insurance, especially for rural families.

b. That a high percentage of families, particularly rural families, in normal times are unable to pay the full cost of complete medical care insurance: which, in the few places where it has been tried, amounts to from $40 to $60 per year per family.

c. That the collection of medical care insurance from rural families is more costly and more complicated than where premiums can be taken from payroll deductions.

In view of these complications, the Council concludes that before final recommendations, further study of the subject should be made, and possibly some experimentation with complete medical care insurance for rural people should be conducted in a limited area.

With the several considerations outlined above in mind as steps toward better means of financing medical services, the Council recommends:

I. *For those able to pay their own medical care bills without public aid:* That there should be greatly extended use of prepayment or insurance plans.

II. *For the medically needy requiring some public aid:*

1. That an appropriation be made of $803,332 per year, or 30 cents per capita of the 1940 population, in addition to the present expenditures of the Departments of Public Welfare, (Appendix Table 5), and the expenditures of the two medical school hospitals, for medical treatment and hospital care of the indigent.

2. That the State's appropriation be alloted to the several counties and cities on the basis of a fair formula.

3. That the appropriation be used to aid in securing needed medical treatment and hospital care for both the indigent and the medically needy above the indigent line.

4. That the appropriation be administered by an appropriate agency. (While a certain part of the appropriation will for a time need to be used in extending aid to chronic or incurable cases, it is expected that more adequate permanent provision will be made for such cases through the work of some other Committee.)

VIII

Licensing Hospitals

The hospital and nursing home picture in Virginia today is as follows: there is absolutely no limitation on who may establish or operate a hospital or nursing home. There are many safeguards thrown around the practice of medicine, dentistry, nursing and other aspects of the healing art. Yet a most important step in the curative process—the nursing home or hospital—has no safeguards whatever thrown around it to insure that patients will be cared for under sanitary conditions and with the proper facilities as regards housing and equipment. No one knows how many nursing homes there are in Virginia because there is no requirement as to reporting the establishment of such businesses. The number of hospitals is fairly well known, though establishment thereof need not be reported.

By statute a person operating a hotel of a certain size must have fire escapes; a person desiring to enter the small loan business must obtain a license from the State Corporation Commission; anyone desiring to practice any one of many professions must take an examination in order that his qualifications can be determined. It appears that the care of the ill and convalescent should be safeguarded to the extent of at least assuring them of safe housing and sanitary surroundings. The layman cannot judge whether a particular hospital is or is not properly run and maintained. Nursing homes which ordinarily care for the convalescent or chronically ill should be subject to regulation in the interest of the patient to avoid abuse since persons entering such institutions are usually not capable of passing upon the sanitary and medical facilities in the home.

Hospitals and nursing homes which are properly housed and staffed have an important place in the care, cure and treatment of the sick, convalescent or chronically ill and their establishment and operation should be encouraged and protected. On the other hand, any such institution which is improperly housed or operated can be a very serious menace to those entering them for treatment.

The Council is aware of the criticism which has been directed at unlimited grants of the rule-making power to administrative agencies under the police power of the State and it is of opinion that such criticism is frequently justified. It has sought in the bill attached to limit the exercise of the power as far as possible by writing into the law the standards which should be maintained. It is not the wish of the Council to put anyone out of business nor to hinder the establishment and operation of facilities for the ill. It does believe that any person who enters a hospital or nursing home should be able to do so, knowing that the housing is adequate, that in case of fire or other disaster he can readily escape, and that in the operation of the establishment such sanitary measures are enforced as will insure that his stay in the institution will not endanger his health or life. The Council submits that under present conditions, except as to institutions which are accredited by national

organizations, there is no assurance whatsoever as to these matters.

In closing, the Council wishes to point out the salient features of the bill. All hospitals and nursing homes are required to be licensed by the State Department of Health. They are required to be housed in buildings which are reasonably fireproof if the patients are housed above the ground floor. In any case where patients are housed above the ground floor proper fire escapes must be provided. A hospital must be staffed by licensed doctors. Nursing homes must have at least one registered nurse in charge. The water supply must be from an approved source and sanitary and waste disposal facilities must be provided in such a way as to avoid the transmission of communicable diseases. All such institutions are subject to inspection by the Department of Health at reasonable times and intervals. Food must be prepared by persons having certificates that they are free from certain diseases, and shall be prepared and served in a sanitary manner. The licenses of such institutions may be revoked for failure to observe such measures. The Department of Health may provide by regulation for such other matters as will promote the safety, and insure proper treatment, of the inmates. Provision is made for different treatment, in certain respects, of existing and future hospitals.

The Council acknowledges its appreciation for the services rendered by the members of the Committee who gave bountifully of their time, knowledge and best endeavor to the work of the Committee. The Assistance rendered by the officials of Virginia Polytechnic Institute and the Experiment Station in making available the services of Dr. W. E. Garnett is gratefully acknowledged.

Respectfully submitted,

Edward L. Breeden, Jr., *Chairman*
Edward O. McCue, Jr., *Vice-Chairman*
Willis E. Cohoon
Charles R. Fenwick
Garland Gray
E. Glenn Jordan
E. Blackburn Moore
John B. Spiers
Robert C. Vaden

A BILL

To amend the Code of Virginia by adding in Title 15 entitled "Public Health", a new chapter numbered 63A, entitled "Licensing and Inspection of Certain Kinds of Hospitals" and 16 new sections therein numbered 1514-a 1 through 1514-a 16, in order to provide for the regulation of the establishment and operation of certain kinds of hospitals in the exercise of the police power in the safeguarding of the health, safety and welfare of members of the public when patients or inmates in such hospitals and to such end, to require all such hospitals to be licensed, inspected and supervised: to provide for the issuance by or under authority of the State Board of Health of licenses for the establishment and operation of such hospitals; to provide likewise for their inspection, supervision and regulation in accordance with the provisions hereof and the provisions of rules and regulations made under authority of law; to provide for the payment of certain fees; to authorize the Board to make, promulgate and enforce reasonable rules and regulations in accordance with the guiding principles hereof governing the exercise of its functions hereunder of issuing licenses to, inspection, supervision and regulation of, such hospitals; to provide for revocation of such licenses under certain circumstances; to provide for review by the courts of actions hereunder in certain circumstances: to provide for injunctions to prevent continuance of operation in certain cases; to prescribe penalties for violation of provisions hereof or of valid rules and regulations made under authority of law; to prescribe effective date or dates for the operation hereof or of certain provisions hereof.

Be it enacted by the General Assembly of Virginia:

1. That the Code of Virginia be amended by adding in Title fifteen entitled "Public Health", a new chapter numbered sixty-three A entitled "Licensing and Inspection of Certain Kinds of Hospitals" and sixteen new sections therein numbered fifteen hundred fourteen-a one through fifteen hundred fourteen-a sixteen, as follows:

CHAPTER 63A

Licensing and Inspection of Certain Kinds of Hospitals

Section 1514-a 1. Short title.—The short title of the law embraced in this chapter of the Code is Virginia Hospital Licensing and Inspection Law.

Section 1514-a 2. Definitions.—As used in this chapter unless a different meaning or construction is clearly required by the context or otherwise (1) the expression "the law", "this law", means the Virginia Hospital Licensing and Inspection Law as embraced now or hereafter in this chapter of the Code; (2) "person" means and includes individual, partnership, association, trust, corporation, municipality, county, State and local governmental agencies, and any other legal or commercial

entity and every manager or operator of a hospital embraced in this law, as requisite, excepting the United States, its departments and employees, and agencies thereof solely owned or directly controlled by it; (3) "hospital" means any institution, place, building or agency by or in which facilities for any accommodation are maintained, furnished, conducted, operated or offered for the hospitalization of two (2) or more non-related mentally or physically sick or injured persons, or for the care of two (2) or more non-related persons requiring or receiving medical or nursing attention or service as chronics, convalescents, aged, disabled or crippled, including, but not to exclusion of other particular kinds with varying nomenclature or designation, ordinary hospitals, sanatoria, sanitaria, rest homes, nursing homes, infirmaries and other related institutions and undertakings, exclusive of maternity hospitals to the extent same are included within the scope of the provisions of chapter three hundred twenty-two, Acts nineteen hundred forty, as from time to time amended, so long as the licensing, inspection and supervisory provisions thereof remain in full force and effect but no longer, and exclusive of dispensary or first aid facilities maintained by any commercial or industrial plant, educational institution or convent, and exclusive of those State institutions now or hereafter subject to control of the State Hospital Board; (4) "Board" means the State Board of Health; (5) "Commissioner" means the State Health Commissioner; (6) "non-related" means not related by blood or marriage, ascending or descending or first degree full or half collateral.

Section 1514-a 3. Establishment or operation of hospitals prohibited without license.— (a) After December thirty-one, nineteen hundred forty-six no person shall establish, conduct, maintain or operate in this State any hospital as defined in and included within the provisions of this law without having a license so to do as provided in this law.

(b) No license issued hereunder shall be assignable or transferable.

(c) No person shall establish, conduct, maintain or operate in Virginia any new hospital without first having obtained a license as provided in this law.

(d) No person may continue to operate an existing hospital unless such operation is approved and licensed as provided herein, provided that all hospitals in actual bona fide operation on the date of passage of this law shall be given a reasonable time not exceeding six months from December thirty-one nineteen hundred forty-six to comply with the minimum standards and requirements prescribed by this law and by all applicable rules and regulations adopted in accordance with law.

Section 1514-a 4. State Board of Health to issue licenses to and inspect hospitals; additional personnel, etc.—(a) The State Board of Health shall issue licenses to establish, conduct, maintain and operate hospitals which after inspection by it or under its authority are found to have complied with the applicable provisions of this law and with all applicable valid rules and regulations adopted by it under authority of law.

(b) The Board shall cause each and every hospital subject to pro-

visions of this law to be periodically inspected in accordance with the provisions of this law and of the rules and regulations adopted by it as provided by law.

(c) The Commissioner is authorized to employ such additional technical and secretarial assistants as found necessary to administer and enforce the provisions of this law and fix their compensation, subject to such limitations as imposed by the current appropriation and by the applicable laws and regulations governing personnel; except that no such existing hospital shall be required under the provisions of this law or by any rule or regulation made by the Board to comply with the requirement of section fifteen hundred fourteen-a five (a) (1514-a 5 (a)) as to rendering its then existing building "reasonably fireproof" but in lieu thereof it must provide reasonable protection against fire hazard to patients or inmates in all cases in which a new hospital or newly constructed portion of a hospital would under the provisions of section fifteen hundred fourteen-a five (a) (1514-a 5 (a)) have to be or be made "reasonably fireproof".

Section 1514-a 5. Minimum standards and requirements.—(a) Every hospital shall be located in a building which is fireproof if patients or inmates are or are proposed to be placed above the ground floor and in every case in which patients or inmates are placed or are proposed to be placed above the ground floor proper fire escapes, reasonably accessible to the rooms in which patients or inmates are located or are to be located, with proper provisions and facilities for guiding lights, must be provided.

(b) Every hospital undertaking to furnish facilities for the treatment of disease or for the performance of operations therein must be staffed by licensed doctors. Every hospital undertaking the care of inmates to the exclusion of furnishing facilities for treatment of disease or performance of operations must have at least one registered nurse in charge.

(c) Water supply must in all cases be from an approved source. Sanitary and waste disposal facilities must be provided in such a way as to avoid transmission of communicable diseases. Food must be prepared by persons having certificates of freedom from diseases known to be or probably communicable by contact or through the alimentary canal, particularly venereal diseases, active pulmonary tuberculosis, and diseases as to which the science of the particular time indicates that there are or may be carriers of the germ of the disease even though there be no active illness from the disease.

(d) Preparation and service of food in all cases must be under sanitary conditions and in a sanitary manner.

(e) The foregoing and all other requirements imposed by or under authority of this law having in view the health, safety or welfare of patients or inmates of hospitals shall be construed as being cumulative and supplementary to all other applicable requirements, State or local, having in view the same or similar objectives or any of them.

Section 1514-a 6. Board authorized to adopt rules and regulations prescribing additional minimum standards, etc.—(a) In addition to the general authority heretofore or hereafter conferred upon the Board to prescribe rules and regulations it may provide by reasonable rules and regulations as to such other relevant matters as will promote the safety and insure proper attention and service to and care of patients and inmates of hospitals and it may classify hospitals in accordance with the character of treatment, care, or service rendered or offered, and prescribe the minimum standards and requirements for each class in conformity with provisions of this law, with the guiding principles expressed or implied herein, and with due regard to and in reasonable conformity to the standards of health, hygiene, sanitation, and safety as established and recognized by the medical profession and by specialists in matters of public health and safety.

(b) The Board may modify, amend, add to or rescind any such rules and regulations from time to time as the public interest appears to require provided that no such change in existing rules and regulations detrimental to the interest of any existing licensee shall be made effective in less than thirty (30) days from date of adoption except in case of extreme emergency.

Section 1514-a 7. Rules and regulations, when effective, etc.—All such rules and regulations shall be made effective only after a reasonable time, not less than thirty (30) days after date of adoption, except in case of extreme emergency, shall at all times be available for inspection during business hours at the office of the State Department of Health, and printed copies shall be made available to licensees and to others having apparent interest to such extent as is reasonably possible under then existing circumstances.

Section 1514-a 8. Application for license.—Any person desiring a license to establish a hospital or to continue the operation of any existing hospital shall file with the Board a verified application setting forth the name, age, which must be at least twenty-one, and address, of the applicant; that he is of reputable and responsible character; the class or kind of hispital being or proposed to be operated; the location thereof; the name of the person in charge; and such additional relevant information as the Board requires. Applications on behalf of a corporation or association or a governmental unit or agency may be made and verified by any two officers thereof.

Section 1514-a 9. Fees.—(a) Each application for a license to operate a hospital shall be accompanied by a fee to be determined by the number of beds available for patients or inmates; as follows: less than fifty (50) beds—ten dollars ($10.00); fifty (50) or more and less than one hundred (100) beds—fifteen dollars ($15.00); one hundred (100) or more and less than two hundred (200) beds—twenty dollars ($20.00); two hundred (200) or more beds—twenty-five dollars ($25.00). No fee shall be refunded.

(b) All licenses shall expire at midnight December thirty-one fol-

lowing and be renewed annually upon payment of a like fee unless cause appear to the contrary.

(c) All fees received under the provisions of this law shall be paid into the State Treasury and be credited to the general fund.

Section 1514-a 10. Alterations or additions to hospitals; additional fees, when necessary; new constructions or operations.—(a) Any person operating a hospital who desires to make any alteration or addition to the building or plant or any material change in any of its facilities may, before making such change, alteration or addition, request the Board to approve same, provided that nothing contained in this law shall be construed as in any way superseding the provisions of any local building code now in existence or hereafter enacted. Thereupon, the Board shall investigate the change, alteration or addition so contemplated to be made and as soon thereafter as reasonably practicable notify the licensee that the change, alteration or addition is or is not approved with such recommendations as the Board may care to make.

(b) In case any alterations or additions have the effect if approved before or after being made of placing the licensee in a different category a supplementary license for the remainder of the license year, after payment of pro rata aditional fee if any necessary under the scale of fees prescribed, must be obtained before beginning operation of the additional facilities or in the new category.

(c) The Board may by its rules and regulations provide for similar consultative advice and assistance, with such limitations and restrictions as deemed proper, as to the construction or reconstruction, equipment and so forth of any proposed hospital the owner or operator of which is desirous ultimately of making application for a license and the Board may fix reasonable fees for such service, subject to credit on the ultimate license application fee if or to the extent it deems proper so to do.

Section 1514-a 11. Display of license.—The current license shall at all times be posted in a conspicuous place in or plainly visible from the main entrance to the hospital.

Section 1514-a 12. Revocation or suspension of license.—(a) The Board is authorized to revoke or suspend any license issued hereunder, on any of the following grounds: (1) Violation of any provision of this law or of any applicable and valid rule or regulation made pursuant to law; (2) Permitting, aiding, or abetting the commission of any illegal act in the hospital; (3) Conduct or practices detrimental to the welfare of any patient or inmate in the hospital.

(b) Before any license issued hereunder is so revoked or suspended, thirty (30) days written notice must be given the licensee of the date set for hearing of the complaint and he must be furnished with a copy of the complaint and shall be entitled to be represented by legal counsel at the hearing. The notice may be given by the Board by registered mail.

(c) If a license is revoked as herein provided, a new application for license may be considered by the Board if, when, and after the con-

ditions upon which revocation was based have been corrected and satisfactory evidence of this fact has been furnished. A new license may then be granted after proper inspection has been made and all provisions of this law and applicable rules and regulations hereunder have been complied with and recommendation to such effect has been made by the Commissioner upon basis of an inspection by any authorized and qualified agent of the State Department of Health.

(d) Suspension of a license shall in all cases be for an indefinite time and the suspension may be lifted and rights under the license fully or partially restored at such time as the Commisisoner determines, upon basis of such an inspection, that the rights of the licensee appear to so require and the interests of the public will not be jeopardized by resumption of operation. No additional fees will have to be paid but any extraordinary expense incident to any such inspection must be paid by the licensee whether the suspension be lifted or not.

Section 1514-a 13. Review by court; appeal.—Any person aggrieved by the refusal of the Board to issue a license or by its revocation or suspension of a license may, within thirty (30) days after receipt of notice of such action or within a reasonable time after its failure to take action upon a completed application for a license, obtain a review by any court having equity jurisdiction in the county or city in which the hospital is or is proposed to be located and a copy of the petition for review shall be filed with the Board. Within five (5) days after the receipt of the copy, the Board shall transmit to the court all of the original papers pertaining to the matter to be reviewed, and the matter shall be thereupon heard by the court or judge in vacation as promptly as circumstances will reasonably permit. The court may enter such orders pending the proceding as are deemed necessary or proper in accordance with the principles of equity jurisprudence and procedure. The hearing may be upon the record so transmitted, but the court may hear such additional evidence as it deems proper, and upon the conclusion of the hearing, the court may affirm, vacate or modify the order appealed from. Costs may be ordered to be paid as the court or judge deems proper in accordance with principles of equity. Any party to the proceeding may appeal from the decision of the court to the Supreme Court of Appeals, in the same manner as appeals are taken from courts of equity generally.

Section 1514-a 14. Injunction to prohibit operation without license; effect of review.—(a) Any court of record having chancery jurisdiction in the county or city where any such hospital is located shall have jurisidiction to enjoin its operation without the requisite license, at the suit of the Board.

(b) A review had as herein provided of the decision of the Board revoking, suspending or refusing to issue a license, or upon its failure to act, shall operate to stay any prosecution hereunder and to suspend the operation of any injunction pending a final disposition of the proceeding for review, and if the court in such proceeding order the license to be reinstated or issued by the Board, a prosecution on account of the particular matter involved shall be barred.

Section 1514-a 15. Violation; penalties.—Any person establishing, conducting, maintaining or operating a hospital without a license shall be guilty of a misdemeanor and upon conviction shall be punished by a fine of not more than one hundred dollars ($100.00) for the first offense and not more than five hundred dollars ($500.00) for each subsequent offense, and each day of any such violation before any conviction shall constitute a separate first offense.

Section 1514-a 16. Severability.—If any provision of this law, or the application thereof to any person or circumstances, is held invalid, the remainder of the law and the application of such provision to other persons or circumstances shall not be affected thereby. If any provision, clause, sentence or section of this law is declared to be invalid or in violation of any provision of the State or Federal Constitution, the remaining provisions of this law shall stand and be effective notwithstanding.

2. The sections added to the Code by this new chapter shall become effective July one, nineteen hundred forty-six, except that provisions requiring the holding of a license to establish or operate a hospital and the provisions inhering in and dependent upon the holding of such a license shall become effective on and after January one, nineteen hundred forty-seven.

APPENDIX I

STATEMENT
of
THE VIRGINIA FEDERATION OF HOME DEMONSTRATION CLUBS

The Virginia Federation of Home Demonstration Clubs, representing more than 25,000 rural women, considers the health and medical care situation in rural Virginia a matter of serious concern, and we wish to urge that corrective measures be undertaken as soon as possible.

We believe that good health is next to life itself, and that for the safeguarding of family and national life adequate medical care should be available to all people regardless of income or of place of residence.

We recognize that the work of State and of local health departments —where the latter exist, their clinical services, their educational and preventive programs have accomplished much in improving the general health of our population. We know well, also, the foundation for better health laid by our Agricultural Extension program in promoting better nutrition, housing, and sanitation among rural people. However, even under ideal conditions which no one claims for our State, the services of doctors and hospitals are necessary, but these are often lacking in our rural areas, and the situation has become acute.

Among our most serious health and medical care problems we list these:

Many counties still do not have the services of public health units.

There is an acute shortage of doctors in rural sections as old doctors who retire are not being replaced by younger ones.

The residents of many counties find access to hospitals most difficult because of great distance and expense.

The cost of medical care in relation to farm income is becoming prohibitive to many.

In many rural sections little free medical service is available, and therefore many people go without needed care.

Funds available to welfare departments are limited so that hospital care for clients can be provided only in emergency cases. These emergency cases might often be prevented by more timely medical attention with much saving of human suffering to the people concerned, and of money to the taxpayer.

Many people who are anxious to pay their way go without medical attention because they cannot afford it, or cannot get it. This was found to be true in 1 out of 14 cases according to a study of about 1880 rural families made in 1941. We believe this to be a conservative figure.

Many people who are above the relief level cannot get the services of a doctor in rural areas unless some one stands for the bill.

Physical examinations of school children are not always made by doctors.

There is too little follow up work of defects found among school children. Needed corrections are often neglected because of difficulty of

securing medical services, because of poverty, and sometimes ignorance or indifference of parents.

The Virginia Federation of Home Demonstration Clubs is stressing health as one of its major goals. It is educating its members to take advantage of medical facilities that are provided, and has asked them to assume responsibility of getting this information to neighbors. As a means of helping themselves the Federation is also urging rural people to participate in hospital insurance and in prepayment surgical and medical care plans which are being worked out. However, these programs do not meet the needs of the very low income groups because premiums are often too high in relation to their income. Then, too, to make these plans wholly successful or effective, more doctors are needed in rural sections and more easily accessible hospitals or health centers.

The Federation wishes to give recognition to the doctors of our country districts who have done a great deal of free practice, but in spite of this a great many people have to go without needed medical care.

We believe that the following measures would go far toward correcting some of the most outstanding medical care problems in rural Virginia, and submit them to you for consideration:

1. The establishment of health units to cover every county in the State, with emphasis on treatment as well as on preventive work.

2. The extension of present hospital facilities into a state-wide hospital center system, with a health center for treatment and preventive work easily accessible to every rural resident. Well qualified physicians should be connected with these centers which would provide the laboratory facilities necessary to attract young doctors into country practice.

3. Provisions for examinations of all school children and teachers by doctors at regular intervals with follow-up work when defects are found. If parents cannot afford to pay for the necessary corrections these should be provided by public health service.

4. Expansion of services of the State Health Department such as its traveling dental and other clinics.

5. An increase in public funds to make possible more medical help to the needy—

   a. through public school health services to children

   b. through health and welfare departments to needy families

6. State aid to establish local health centers.

7. Increased support to State institutions rendering health services.

We are deeply grateful for this opportunity to express our views, and pledge our full cooperation and support to programs undertaken for the correction of the rural health and medical care situation in Virginia.

Respectfully submitted,

Health Committee, Virginia Federation
of Home Demonstration Clubs

Bertha Wailes (Mrs. Ben),
Co-Chairman

APPENDIX TABLE 1

VIRGINIA'S RANK IN HEALTH AND MEDICAL CARE, 1940

FACTOR	AVERAGE PERCENTAGE OR RATIO			Virginia's Rank
	United States	Virginia	Virginia + or − U. S.	
Hospital beds per 10,000 population	35	31	− 4	33
Hospital admissions per 1,000 population	70	61	− 9	35
Percent hospital beds occupied	70.3	68.7	− 1.6	19
Days hospitalization per 1,000 population	90	77	−13	31
Dentists per 100,000 population	58	32	−26	35
Physicians and Surgeons per 100,000 population	125	98	−27	31
Trained nurses and student nurses per 100,000 population	270	210	−60	32
Total percentage of live births occurring in hospitals, 1942	67.9	44.8	−23.1	38
Percentage of white live births occurring in hospitals, 1942	72.7	54.5	−18.2	39
Percentage of Negro live births occurring in hospitals, 1942	28.9	16.3	−12.6	39
Percentage urban births in hospitals	80.5	67.0	−13.5	38
Percentage rural births in hospitals	36.5	22.9	−13.6	38
Total percentage of live births not attended by physicians, 1942	7.4	18.8	11.4	39
Percentage of white live births not attended by physicians, 1942	2.5	6.8	4.3	42
Percentage of Negro live births not attended by physicians, 1942	46.8	54.5	7.7	41
Percentage of urban live births not attended by physicians, 1942*	2.6	8.6	6.0	38
Percentage of rural live births not attended by physicians, 1942†	14.2	24.8	10.6	40
Total maternal deaths per 1,000 live births	3.8	4.5	0.7	34
Rural maternal deaths per 1,000 live births	4.0	4.4	0.4	33
Non-white maternal deaths per 1,000 live births	7.7	7.5	− 0.2	29
Total infant deaths plus stillbirths per 1,000 live births plus stillbirths	76	91	15	39
White infant deaths plus stillbirths per 1,000 live births	69	76	7	39
Non-white infant deaths plus stillbirths per 1,000 live births	123	129	6	39

APPENDIX TABLE 1—CONTINUED

FACTOR	AVERAGE PERCENTAGE OR RATIO			Virginia's Rank
	United States	Virginia	Virginia + or − U. S.	
Total adjusted death rate per 1,000 population	10.8	11.1	0.3	29
White adjusted death rate per 1,000 population	10.4	9.6	− 0.8	29
Non-white adjusted death rate per 1,000 population	13.8	15.6	1.8	29
Rural adjusted death rate per 1,000 population	9.8	10.6	0.8	29
Tuberculosis death rate per 100,000	45.9	58.1	12.2	40
Rejections per 100 men called in Selective Service July 1, 1942 to January 1, 1944‡	39.2	45.6	6.4	43
Public Health expenditure per capita	$ .37	$ .47	$ .10	17
Per capita State Government expenditures for all purposes	$ 36.80	$ 28.23	$− 8.57	36

*Urban above 10,000 population.
†Rural under 10,000 population.
‡Virginia Director of Selective Service.

Sources: Medical care services in North Carolina, Progress Report No. R.S.-4, N. C. Agr. Exp. Sta., 1944: also U. S. Census and U. S. Vital Statistics, and Reports of Senate Committee hearings on Wartime Health and Education.

APPENDIX TABLE 2

PERCENT OF VIRGINIA SCHOOL CHILDREN REPORTED IN TEACHERS INSPECTIONS AS HAVING ONE OR MORE PHYSICAL DEFECTS, AND PERCENT HAVING DEFECTS CORRECTED, WHITE AND NEGRO 1941-42 SESSION, AND COUNTY COMPARISON'S WITH STATE PERCENTAGES[1]

COUNTIES	WHITE				NEGRO			
	Percent with Defects	+ or − State Percentage	Percent with Corrections	+ or − State Percentage	Percent with Defects	+ or − State Percentage	Percent with Corrections	+ or − State Percentage
THE STATE	61		32		44		34	
URBAN	49	−12	44	12	39	− 5	38	4
RURAL	64	3	29	− 3	46	2	33	− 1
Accomack	54	− 7	26	− 8	37	− 7	8	−26
Alleghany	66	5	18	−14	41	− 3	10	−24
Albemarle	72	11	35	3	61	17	51	17
Amelia	54	− 7	25	− 7	57	13	35	1
Amherst	64	3	23	− 9	46	2	76	42
Appomattox	66	5	46	14	53	9	52	18
Arlington	40	−21	45	13	53	9	65	31
Augusta	52	− 9	24	− 8	20	24	29	− 5
Bath	95	34	45	13			53	19
Bedford	72	11	12	−20	41	− 3	20	−14
Bland	24	−40	16	−16				
Botetourt	65	4	17	−15	38	6	15	−19
Brunswick	72	11	34	2	44	0	20	−14
Buchanan	38	−23	26	− 6				
Buckingham	79	18	38	6	44	0	20	−14
Campbell	59	− 3	20	−12	41	− 3	71	37
Caroline	62	1	42	10	49	5	24	−10
Carroll	69	8	33	1	50	6		
Charles City	56	− 5	33	1	42	− 2	16	−18
Charlotte	65	4	26	6	53	9	9	−25
Chesterfield	43	18	42	10	51	7	61	27

APPENDIX TABLE 2—CONTINUED

COUNTIES	WHITE				NEGRO			
	Percent with Defects	+ or − State Percentage	Percent with Corrections	+ or − State Percentage	Percent with Defects	+ or − State Percentage	Percent with Corrections	+ or − State Percentage
Clarke	62	1	28	− 4	53	9	36	2
Craig	69	8	75	43	.....	.....	.....	.....
Culpeper	71	10	32	0	55	11	27	− 7
Cumberland	80	29	35	3	55	11	11	−23
Dickenson	84	3	10	−22	44	0	4	−30
Dinwiddie	62	1	25	− 7	57	13	37	3
Elizabeth City	60	− 1	26	− 6	62	18	50	16
Essex	46	−15	13	−19	24	−20	26	− 6
Fairfax	85	24	36	4	42	− 2	66	32
Fauquier	69	8	31	− 1	31	−13	90	56
Floyd	62	1	27	− 5	79	35	10	−24
Fluvanna	89	28	27	− 5	.....	.....	66	32
Franklin	58	− 3	23	− 9	39	− 5	29	−11
Frederick	79	18	28	− 4	52	8	17	−17
Giles	80	29	14	−18	.....	.....	.....	.....
Gloucester	41	−20	21	−11	17	−27	14	−20
Goochland	44	−17	41	9	56	12	63	29
Grayson	70	19	20	−12	29	−15	42	8
Greene	48	−13	49	17	33	−11	3	−31
Greensville	69	8	28	− 4	54	10	11	−23
Halifax	62	1	22	−10	62	18	14	−20
Hanover	23	−38	20	−12	33	−11	18	−16
Henrico	48	−13	62	30	44	0	54	20
Henry	83	22	17	−15	56	12	23	−11
Highland	74	13	11	−21	35	− 9	0	−34
Isle of Wight	22	−39	77	45	22	−22	23	−11
James City	34	−27	30	− 2	19	−25	52	18
King and Queen	73	12	55	23	68	24	44	10

King George	35	−26	41	9	25	−19	14	−20
King William	45	−16	36	4	25	−19	35	1
Lancaster	64	3	20	−12	36	− 8	12	−22
Lee	68	7	13	−19	39	− 5	50	16
Loudoun	75	14	35	3	44	0	69	35
Louisa	64	3	19	−13	32	14	10	−24
Lunenburg	71	10	20	−12	49	5	25	− 9
Madison	64	3	38	6	46	2	12	22
Mathews	74	13	24	8	65	21	28	− 6
Mecklenburg	54	− 7	45	13	28	−16	29	− 5
Middlesex	33	−28	63	31	33	−11	88	54
Montgomery	75	14	17	−15	61	17	33	− 1
Nansemond	69	8	21	−11	67	23	68	34
Nelson	75	14	25	− 7	57	13	14	−20
New Kent	62	1	45	13	57	13	22	−12
Norfolk	96	35	33	1	39	− 5	37	3
Northampton	48	−13	32	0	35	− 9	17	−17
Northumberland	54	− 7	34	2	48	4	26	− 8
Nottoway	91	30	34	2	33	−11	3	−31
Orange	49	−12	48	16	55	11	35	1
Page	73	12	25	− 7	.....	.....	7	−27
Patrick	61	0	37	5	15	29	77	43
Pittsylvania	65	4	31	− 1	46	2	30	− 4
Powhatan	57	− 4	11	−21	73	29	12	−22
Prince Edward	70	9	44	12	63	19	10	−24
Prince George	55	− 6	34	2	57	13	98	64
Princess Anne	44	−17	24	−12	19	−25	49	15
Prince William	67	6	49	15	52	8	69	35
Pulaski	95	34	29	− 3	42	− 2	6	−28
Rappahannock	63	2	51	19	40	− 4	73	39
Richmond	62	1	82	50	60	16	66	32
Roanoke	68	7	37	5	43	− 1	92	58
Rockbridge	63	2	42	10	50	6	63	29
Rockingham	69	8	30	− 2	41	− 3	5	−29
Russell	69	8	21	−11	28	−16	28	− 6
Scott	61	0	13	−19	58	14	63	29
Shenandoah	77	16	37	5	55	11	18	−16
Smyth	79	18	33	1	.....	.....	41	7
Southampton	66	5	42	10	35	− 9	21	−13

APPENDIX TABLE 2—CONTINUED

COUNTIES	WHITE				NEGRO			
	Percent with Defects	+ or − State Percentage	Percent with Corrections	+ or − State Percentage	Percent with Defects	+ or − State Percentage	Percent with Corrections	+ or − State Percentage
Spotsylvania	62	1	45	13	72	28	7	−27
Stafford	90	29	40	8	.....	.....	58	24
Surry	64	3	31	− 1	74	30	15	−19
Sussex	61	0	27	− 3	35	− 9	29	− 5
Tazewell	74	15	26	− 6	.....	.....	33	− 1
Warren	76	15	23	− 9	49	5	12	−22
Warwick	77	16	32	0	62	18	14	−20
Washington	59	− 2	32	0	61	17	16	−18
Westmoreland	.....	.....	.....	.....	.....	.....	.....	.....
Wise	62	1	26	− 6	62	18	23	−11
Wythe	71	10	33	1	65	21	4	−30
York	.....	.....	29	− 2	30	−14	7	−27

[1]Data based on teachers' inspections and corrections reports, 1941-42. Report of State Department of Education. Percentages of Col. 1 are based on 90 percent school enrollment. Percent corrections (Col. 3) percent of those with defects.

APPENDIX TABLE 3

DEATHS UNDER ONE YEAR OF AGE PER 1,000 LIVE BIRTHS, AND PERCENTAGE OF MATERNITY CASES IN HOSPITALS, WHITE AND NEGRO, 1941-42[1]

COUNTIES	DEATHS PER 1,000 LIVE BIRTHS				PERCENTAGE OF BIRTHS IN HOSPITALS			
	White		Negro		White		Negro	
	Percent	+ or − State Rate	Percent	+ or − State Rate	Percent	+ or − State Rate	Percent	+ or − State Rate
STATE (Rural)	54		95		31		6	
Accomack	51	− 3	124	29	28	− 3	5	− 1
Albemarle	71	17	123	28	63	32	52	45
Alleghany	32	−22	52	−43	29	− 2	12	6
Amelia	53	− 1	164	69	12	−19	2	− 4
Amherst	49	− 5	117	22	39	8	7	1
Appomattox	40	−14	159	64	31	0	5	− 1
Augusta	71	17	113	18	34	3	20	14
Bath	106	52	67	−28	17	−14	7	1
Bedford	80	26	88	− 7	32	1	5	− 1
Bland	95	41			6	−25		
Botetourt	31	−23	119	24	17	−14	5	− 1
Brunswick	58	4	64	−31	16	−15	3	− 3
Buchanan	92	38			9	−22		
Buckingham	58	4	99	4	23	− 8	3	− 3
Campbell	46	− 8	72	−23	36	4	8	2
Caroline	46	− 8	71	−24	18	−13	3	− 3
Carroll	83	29			3	−29		
Charles City			71	−24	50	19	5	− 1
Charlotte	49	− 5	89	− 6	20	−11	3	− 3
Chesterfield	25	−29	133	38	67	36	4	− 2
Clarke	37	−17	111	16	28	− 3	22	16
Craig	95	41			14	−17		

APPENDIX TABLE 3—CONTINUED

COUNTIES	DEATHS PER 1,000 LIVE BIRTHS				PERCENTAGE OF BIRTHS IN HOSPITALS			
	White		Negro		White		Negro	
	Percent	+ or − State Rate	Percent	+ or − State Rate	Percent	+ or − State Rate	Percent	+ or − State Rate
Culpeper	55	1	54	−41	34	3	8	2
Cumberland	54	0	75	−20	38	7	3	− 3
Dickenson	66	12	.....	.....	19	−12	10	4
Dinwiddie	16	−38	108	13	22	− 9	2	− 4
Elizabeth City	37	−17	97	2	95	64	24	18
Essex	105	51	82	−13	28	− 3	5	− 1
Fairfax	36	−18	71	−24	75	44	49	43
Fauquier	45	− 9	122	27	36	5	11	5
Floyd	49	− 5	214	119	5	−26	7	1
Fluvanna	77	23	182	87	33	2	14	8
Franklin	56	2	122	27	9	22	2	− 4
Frederick	40	−14	273	183	46	15	9	3
Giles	78	24	111	16	13	−18	.....	.....
Gloucester	61	7	86	− 9	26	− 5	2	− 4
Goochland	28	−26	63	−32	24	− 7	5	− 1
Grayson	60	6	125	30	6	−25	.....	.....
Greene	103	49	56	−39	48	17	28	22
Greensville	39	−15	80	−15	41	10	2	− 4
Halifax	56	2	80	−15	21	−10	2	− 4
Hanover	76	22	63	−32	27	− 4	4	− 2
Henrico	30	−24	101	6	82	51	28	22
Henry	79	25	64	−31	15	−16	8	2
Highland	56	2	.....	.....	5	−26	.....	.....
Isle of Wight	81	27	102	7	24	− 7	1	− 5
James City	12	−42	68	−27	73	42	6	0

King and Queen	33	−21	82	−13	50	19	10	4
King George	65	11	141	46	21	−10	4	− 2
King William	56	2	145	50	33	2	4	− 2
Lancaster	24	−30	79	−16	13	−18	3	− 3
Lee	89	35	.....	.....	5	−26	.....	.....
Loudoun	48	− 6	78	−17	41	10	12	6
Louisa	44	−10	49	−46	23	− 8	7	1
Lunenburg	54	0	62	−33	22	− 9	6	0
Madison	55	1	41	−54	59	28	18	12
Mathews	29	−25	97	2	38	7	7	1
Mecklenburg	45	− 9	82	−13	22	− 9	2	− 4
Middlesex	44	−10	76	−19	24	− 7	.....	.....
Montgomery	60	6	122	27	31	0	5	− 1
Nansemond	47	− 7	123	28	33	2	2	− 4
Nelson	74	20	148	53	41	10	16	10
New Kent	50	− 4	39	−56	65	34	8	2
Norfolk	43	−11	63	−32	74	43	5	− 1
Northampton	51	− 3	161	66	59	28	2	− 4
Northumberland	98	44	194	99	16	−15	2	− 4
Nottoway	15	−39	70	−25	31	0	5	− 1
Orange	72	18	102	7	56	25	22	16
Page	56	2	429	334	22	− 9	14	8
Patrick	50	− 4	91	− 4	6	−25	.....	.....
Pittsylvania	65	11	57	−38	46	15	3	− 3
Powhatan	87	33	122	27	37	6	6	0
Prince Edward	45	− 9	108	13	52	21	5	− 1
Prince George	83	29	129	34	53	22	1	− 5
Princess Anne	50	− 4	32	−63	42	11	16	10
Prince William	71	17	114	19	60	29	4	− 2
Pulaski	50	− 4	57	−38	34	3	.....	.....
Rappahannock	29	−25	107	12	18	−13	11	5
Richmond	54	0	137	42	11	−20	.....	.....
Roanoke	52	− 2	87	− 8	64	33	6	0
Rockbridge	49	− 5	63	−32	22	− 9	3	− 3
Rockingham	52	− 2	217	122	40	9	61	55
Russell	57	3	77	−18	10	−21	8	2
Scott	72	18	.....	.....	8	−23	.....	.....
Shenandoah	48	− 6	125	30	41	10	38	32
Smyth	78	24	.....	.....	12	−19	.....	.....

APPENDIX TABLE 3—CONTINUED

COUNTIES	DEATHS PER 1,000 LIVE BIRTHS				PERCENTAGE OF BIRTHS IN HOSPITALS			
	White		Negro		White		Negro	
	Percent	+ or − State Rate	Percent	+ or − State Rate	Percent	+ or − State Rate	Percent	+ or − State Rate
Southampton	81	27	121	26	56	25	3	− 3
Spotsylvania	66	12	29	−66	48	17	14	8
Stafford	58	4	98	3	53	22	7	1
Surry	.....	.....	133	38	25	− 6	.....	.....
Sussex	18	−36	98	3	51	20	1	− 5
Tazewell	65	11	68	−27	14	−17	3	− 3
Warren	44	−10	.....	.....	49	18	16	10
Warwick	47	− 7	58	−37	90	59	9	3
Washington	59	5	63	−32	17	−14	13	7
Westmoreland	35	−19	131	36	32	1	1	− 5
Wise	81	27	167	72	10	−21	.....	.....
Wythe	40	−14	91	− 4	11	−20	6	0
York	40	−14	128	33	72	41	11	5

[1]Based on 1942 Report of State Department of Health. Later reports show slight improvement in State and some county rates.

APPENDIX TABLE 4

APPROXIMATE AVERAGE NET FARM INCOME PER CAPITA OF FARM POPULATION, AND OTHER INDICES OF ECONOMIC STATUS, 1940

COUNTIES	Approximate Net Farm Income Per Capita of 1940 Farm Population[1]	Percent Farm Operators With Gross Farm Income of Under $600 in 1939[2]	Average Value Home Produced Supplies, 1939[3]	MARGINAL STANDARD HOMES, 1939[4]		
				Total	White	Negro
State	$ 100	61	$ 252	156,543	90,940	65,603
Accomack	207	17	207	6,454	4,146	2,308
Albemarle	68	70	273	3,074	2,340	734
Alleghany	122	45	357	1,399	1,354	45
Amelia	88	66	205	1,240	483	757
Amherst	72	74	266	2,206	1,417	789
Appomattox	98	56	253	1,277	909	368
Arlington	.....	.....	130	.....	.....	.....
Augusta	135	53	273	3,298	3,140	158
Bath	76	57	270	599	567	32
Bedford	83	70	232	3,560	2,693	867
Bland	113	56	341	897	892	5
Botetourt	93	68	261	2,049	1,778	271
Brunswick	87	55	209	2,605	1,086	1,519
Buchanan	63	74	419	3,731	3,731	.....
Buckingham	67	75	232	2,047	1,113	934
Campbell	83	61	255	3,087	2,176	911
Caroline	56	71	150	1,877	852	1,025
Carroll	62	76	259	3,635	3,617	18
Charles City	59	77	180	.....	.....	.....
Charlotte	85	59	215	2,187	1,164	1,023
Chesterfield	55	79	193	2,130	1,638	492
Clarke	153	40	250	774	640	134
Craig	79	59	269	390	378	12

APPENDIX TABLE 4—CONTINUED

COUNTIES	Approximate Net Farm Income Per Capita of 1940 Farm Population[1]	Percent Farm Operators With Gross Farm Income of Under $600 in 1939[2]	Average Value Home Produced Supplies, 1939[3]	MARGINAL STANDARD HOMES, 1939[4]		
				Total	White	Negro
Culpeper	$ 122	54	$ 270	1,361	913	448
Cumberland	68	77	180	1,030	352	678
Dickenson	52	87	336	2,682	2,682	.....
Dinwiddie	83	47	276	1,744	644	1,100
Elizabeth City	113	71	152	943	629	314
Essex	68	74	221	985	475	510
Fairfax	115	60	268	1,447	1,275	172
Fauquier	119	60	267	2,189	1,487	702
Floyd	79	69	227	1,734	1,667	67
Fluvanna	53	74	231	950	496	454
Franklin	79	67	242	3,097	2,610	487
Frederick	132	56	244	1,390	1,377	13
Giles	90	59	343	1,308	1,291	17
Gloucester	31	85	175	1,441	863	578
Goochland	61	79	217	1,286	501	785
Grayson	85	71	258	2,921	2,829	92
Greene	47	79	189	710	582	128
Greensville	96	39	245	1,573	478	1,095
Halifax	113	46	224	4,894	2,497	2,397
Hanover	73	62	219	2,027	1,258	769
Henrico	136	64	243	1,635	1,364	271
Henry	56	76	240	3,032	2,214	818
Highland	128	49	301	551	534	17
Isle of Wight	153	23	221	1,918	885	1,063
James City	112	63	250	687	370	317
King and Queen	71	75	234	1,062	428	634

King George	80	70	264	882	544	338
King William	76	73	198	888	407	481
Lancaster	56	73	152	1,588	881	707
Lee	81	74	280	5,739	5,707	32
Loudoun	211	40	337	2,069	1,646	423
Louisa	55	77	213	1,799	974	825
Lunenburg	123	45	276	1,759	864	895
Madison	89	67	283	968	655	313
Mathews	36	81	243	1,020	727	293
Mecklenburg	123	39	243	4,177	1,892	2,285
Middlesex	50	83	145	1,074	577	497
Montgomery	111	58	302	2,841	2,718	123
Nansemond	128	30	217	3,283	913	2,370
Nelson	60	73	269	2,303	1,675	628
New Kent	61	64	222	808	312	496
Norfolk	162	53	189	3,484	2,133	1,351
Northampton	265	13	280	2,504	1,127	1,377
Northumberland	50	68	178	1,411	820	591
Nottoway	90	64	215	1,404	644	760
Orange	79	64	294	1,544	1,019	525
Page	72	72	226	1,700	1,685	15
Patrick	71	73	239	2,151	1,967	184
Pittsylvania	130	36	284	7,651	5,223	2,428
Powhatan	48	80	205	625	280	345
Prince Edward	75	68	193	1,616	730	886
Prince George	61	62	213	1,256	696	560
Princess Anne	187	42	252	1,984	1,131	853
Prince William	126	59	176	1,033	826	207
Pulaski	78	71	219	1,923	1,735	188
Rappahannock	116	68	278	905	705	200
Richmond	84	62	216	913	550	363
Roanoke	81	67	265	1,886	1,798	88
Rockbridge	75	67	220	2,419	2,298	121
Rockingham	151	42	270	3,144	3,112	34
Russell	111	62	303	3,493	3,476	17
Scott	102	60	306	4,026	4,020	6
Shenandoah	142	51	225	2,448	2,444	4

APPENDIX TABLE 4—CONTINUED

COUNTIES	Approximate Net Farm Income Per Capita of 1940 Farm Population[1]	Percent Farm Operators With Gross Farm Income of Under $600 in 1939[2]	Average Value Home Produced Supplies, 1939[3]	Marginal Standard Homes, 1939[4]		
				Total	White	Negro
Smyth	$ 132	61	$ 275	3,179	3,165	14
Southampton	133	26	165	3,022	1,015	2,007
Spotsylvania	74	74	277	1,098	751	347
Stafford	59	71	231	896	660	236
Surry	156	38	226	998	392	606
Sussex	121	36	259	1,738	503	1,235
Tazewell	141	63	374	3,499	3,418	81
Warren	114	84	270	627	587	40
Warwick	62	.....	158	633	452	181
Washington	118	55	283	4,287	4,185	102
Westmoreland	65	59	221	1,468	735	733
Wise	51	90	280	5,437	5,066	371
Wythe	112	59	287	2,281	2,206	75
York	72	75	185	1,303	751	552

[1]To get family income, multiply by 4.5 or the approximate median size of farm families.
[2]Gross farm income includes value of home produced supplies and the expenses of farm operation.
[3]Home produced supplies do not include house rent.
[4]Estimates of rural marginal standard homes based on:

(1) Two thirds of farm tenants and wage laborers in 1940 plus (2) farm and rural non-farm owners living in houses valued at less than $700 in 1940 Census, plus (3) rural non-farm families paying under $7 per month rent in 1940.

Source: Based on 1940 Agricultural Population and Housing Census for Virginia.

APPENDIX TABLE 5

EXPENDITURES FROM PUBLIC (TAX) FUNDS FOR MEDICAL CARE AND HOSPITALIZATION, JULY 1, 1943 TO JUNE 30, 1944[1]

AREA UNIT	TOTAL		MEDICAL CARE		HOSPITALIZATION		FROM LOCAL FUNDS		FROM STATE FUNDS	
	Amount	Per Capita	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
STATE	$ 535,521	.19	$ 106,126	20	$ 429,245	80	$ 489,551	91	$ 45,970	.9
CITIES	382,379	.35	76,610	20	305,770	80	380,280	99	2,099	1
Percent	71		72		71		78		5	
COUNTIES	153,142	.09	29,516	19	123,476	81	109,271	71	43,871	29
Percent	29		28		29		22		95	
COUNTIES										
Accomack	939	.03	186	20	753	80	650	69	289	31
Albemarle	3,938	.20	738	19	3,200	81	3,846	98	92	2
Alleghany	1,465	.07	647	44	818	56	907	62	558	38
Amelia	885	.12	360	41	525	59	885	100	.....	.....
Amherst	402	.06	.....	.....	402	100	151	38	251	62
Appomattox	578	.07	287	50	291	50	232	40	345	60
Arlington	4,202	.05	482	12	3,620	88	3,971	95	230	5
Augusta	2,377	.11	920	39	1,458	61	1,411	59	966	41
Bath	643	.03	315	49	328	51	588	91	55	9
Bedford	728	.03	185	25	544	75	298	41	430	59
Bland	213	.04	50	23	163	77	80	38	133	62
Botetourt	2,115	.16	1,249	59	866	41	1,504	71	611	29
Brunswick	324	.02	112	35	212	65	121	37	202	63
Buchanan	1,460	.06	262	18	1,198	82	556	38	904	62
Buckingham	901	.08	18	2	883	98	650	72	251	28
Campbell	1,316	.06	284	22	1,032	78	843	64	473	36

APPENDIX TABLE 5—CONTINUED

AREA UNIT	TOTAL		MEDICAL CARE		HOSPITALIZATION		FROM LOCAL FUNDS		FROM STATE FUNDS	
	Amount	Per Capita	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
COUNTIES—Continued										
Caroline	$ 317	.03	$ 68	22	$ 249	78	$ 119	37	$ 198	63
Carroll	2,637	.12	867	33	1,770	67	1,083	41	1,554	59
Charles City	35	.01	35	100	.....	.....	13	37	22	63
Charlotte	1,150	.08	60	5	1,091	95	716	62	434	38
Chesterfield	3,764	.13	656	17	3,108	83	2,720	72	1,044	28
Clarke	1,299	.20	800	62	499	38	1,175	90	124	10
Craig	162	.05	162	100	.....	.....	102	63	60	37
Culpeper	455	.04	61	13	394	87	172	38	283	62
Cumberland	56	.01	20	36	36	64	21	38	35	62
Dickenson	1,092	.06	502	46	590	54	678	62	414	38
Dinwiddie	625	.04	491	79	134	21	464	74	161	26
Elizabeth City	2,105	.07	.....	.....	2,105	100	1,192	57	912	43
Essex	888	.14	467	53	421	47	666	75	222	25
Fairfax	2,525	.05	70	3	2,455	97	2,480	98	45	2
Fauquier	3,205	.16	138	4	3,067	96	2,982	93	223	7
Floyd	312	.03	91	29	221	71	117	38	195	62
Fluvanna	911	.13	518	57	392	43	718	79	193	21
Franklin	444	.02	.....	.....	444	100	198	45	246	55
Frederick	2,098	.15	87	4	2,010	96	2,098	100	.....	.....
Giles	3,050	.20	1,550	51	1,500	49	3,050	100	.....	.....
Gloucester	438	.05	150	34	288	66	219	50	219	50
Goochland	206	.03	36	17	170	83	162	79	44	21
Grayson	781	.05	304	39	478	61	293	38	488	62
Greene	39	.01	39	100	.....	.....	15	38	24	62
Greensville	1,681	.12	703	42	978	58	780	46	901	54
Halifax	3,134	.09	1,370	44	1,764	56	2,677	86	457	14

Hanover	1,960	.11	104	5	1,856	95	735	38	1,225	62
Henrico	4,646	.16	214	5	4,432	95	4,494	97	152	3
Henry	850	.03	122	14	727	86	319	37	531	63
Highland	577	.14	96	17	481	83	216	37	360	63
Isle of Wight	2,108	.16	85	4	2,023	96	1,643	78	465	22
James City	131	.03			131	100	131	100		
King and Queen	280	.05	22	8	258	92	158	56	122	44
King George	27	.01	15	56	12	44	24	89	3	11
King William	54	.01	36	67	18	33	20	37	34	63
Lancaster										
Lee	412	.01	146	35	267	65	154	37	258	63
Loudoun	2,929	.16	901	31	2,028	69	2,316	79	613	21
Louisa										
Lunenburg	1,010	.08	275	27	735	73	839	83	171	17
Madison	181	.02	17	9	164	91	68	38	113	62
Mathews	22	.00	6	27	16	73	8	36	14	64
Mecklenburg	2,037	.07	346	17	1,691	83	888	44	1,149	56
Middlesex	468	.08	70	15	398	85	231	49	237	51
Montgomery	752	.03	95	13	657	87	282	38	470	62
Nansemond	1,291	.06	609	47	682	53	931	72	360	28
Nelson	516	.04	132	26	384	74	333	65	183	35
New Kent	266	.07	39	15	227	85	266	100		
Norfolk	13,592	.15	409	3	13,183	97	11,832	87	1,760	13
Northampton	3,890	.23	58	1	3,832	99	3,841	99	49	1
Northumberland	215	.03	13	6	202	94	207	96	8	4
Nottoway	531	.03	110	21	421	79	229	43	301	57
Orange	268	.02	74	28	194	72	266	99	2	1
Page	2,323	.17	1,581	68	742	32	1,718	74	604	26
Patrick	1,015	.08	504	50	511	50	380	37	634	63
Pittsylvania	2,778	.05	672	24	2,106	76	1,718	62	1,061	38
Powhatan	128	.02	78	61	50	39	48	38	80	62
Prince Edward	5,424	.42	76	1	5,348	99	5,264	97	161	3
Prince George	960	.09	118	12	843	88	959	100	1	
Princess Anne	3,551	.14	430	12	3,121	88	2,252	63	1,299	37
Prince William	2,966	.20	319	11	2,647	89	1,293	44	1,673	56
Pulaski	4,673	.20	1,185	25	3,489	75	1,753	38	2,921	62
Rappahannock	401	.07	72	18	329	82	180	45	221	55
Richmond	69	.01	9	13	60	87	28	41	41	59
Roanoke	2,366	.06	435	18	1,931	82	1,137	48	1,229	52

APPENDIX TABLE 5—CONTINUED

AREA UNIT	TOTAL		MEDICAL CARE		HOSPITALIZATION		FROM LOCAL FUNDS		FROM STATE FUNDS	
	Amount	Per Capita	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
COUNTIES—Continued										
Rockbridge	$ 1,147	.06	$ 127	11	$ 1,020	89	$ 930	81	$ 217	19
Rockingham	2,643	.07	766	29	1,877	71	2,154	82	489	18
Russell	901	.04	224	25	677	75	369	41	532	59
Scott	656	.03	312	48	344	52	246	38	410	62
Shenandoah	869	.05	166	19	703	81	449	52	420	48
Smyth	1,040	.04	268	26	772	74	390	38	650	62
Southampton	2,360	.10	389	17	1,970	83	1,389	59	971	41
Spotsylvania	105	.01	72	69	32	31	39	37	65	63
Stafford	162	.02	82	51	80	49	120	74	42	26
Surry	870	.16	116	13	754	87	422	49	447	51
Sussex	1,032	.09	37	4	995	96	648	63	384	37
Tazewell	1,325	.03	98	7	1,227	93	584	44	741	56
Warren	9,848	.86	208	2	9,640	98	9,333	95	515	5
Warwick	1,011	.04	.....	.....	1,011	100	402	40	609	60
Washington	3,477	.11	694	20	2,784	80	1,460	42	2,017	68
Westmoreland	187	.02	.....	.....	187	100	70	37	117	63
Wise	1,460	.03	621	42	840	58	566	39	894	61
Wythe	2,485	.12	524	22	1,912	78	932	38	1,553	62
York	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
CITIES										
Alexandria	$ 13,427	.26	$ 1,983	15	$ 11,444	85	$ 13,427	100	.....	.....
Bristol	3,861	.27	106	3	3,755	97	3,770	98	$ 91	2
Buena Vista	29	.01	29	100	.....	.....	10	35	19	65

Charlottesville	3,741	.19	741	20	3,000	80	3,741	100	.....	.....
Clifton Forge	2,576	.46	981	38	1,595	62	2,247	87	329	13
Danville	8,077	.26	1,263	16	6,814	84	8,077	100	.....	.....
Fredericksburg	3,203	.26	203	6	3,000	94	3,182	99	21	1
Hampton	76	.01	.....	.....	76	100	60	79	16	21
Harrisonburg	5,403	.62	272	5	5,131	95	5,403	100	.....	.....
Hopewell	272	.03	15	6	257	94	102	38	170	62
Lynchburg	17,910	.43	2,750	15	15,160	85	17,910	100	.....	.....
Martinsville	215	.02	37	17	178	83	80	37	134	63
Newport News	17,444	.33	2,218	13	15,225	87	17,437	100	6	.....
Norfolk	99,078	.52	28,743	29	70,335	71	98,869	100	209	.....
Petersburg	7,820	.24	3,820	49	4,000	51	7,820	100	.....	.....
Portsmouth	25,867	.42	9,659	37	16,208	63	25,867	100	.....	.....
Radford	432	.05	90	21	342	79	162	38	270	62
Richmond	126,387	.56	4,026	3	122,361	97	126,387	100	.....	.....
Roanoke	29,395	.46	13,477	46	15,917	54	29,395	100	.....	.....
South Norfolk	3,191	.32	530	17	2,661	83	2,942	92	249	8
Staunton	2,354	.18	.....	.....	2,354	100	2,233	95	121	5
Suffolk	3,128	.24	1,505	48	1,624	52	2,665	85	463	15
Williamsburg	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Winchester	8,492	.70	4,159	49	4,334	51	8,490	100	2	.....

[1]Source: Based on data furnished by State Department of Public Welfare from special reports of local Welfare Department.

Chart I

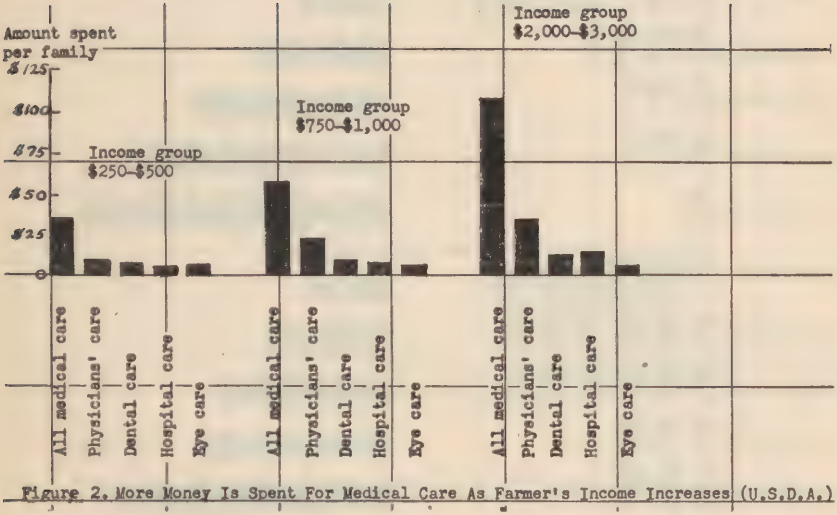


Figure 2. More Money Is Spent For Medical Care As Farmer's Income Increases (U.S.D.A.)

CHART II

Figure 1.

April 1944

Chart III

PERCENTAGE OF URBAN AND FARM FAMILIES SUBSCRIBING TO PREPAYMENT PLANS

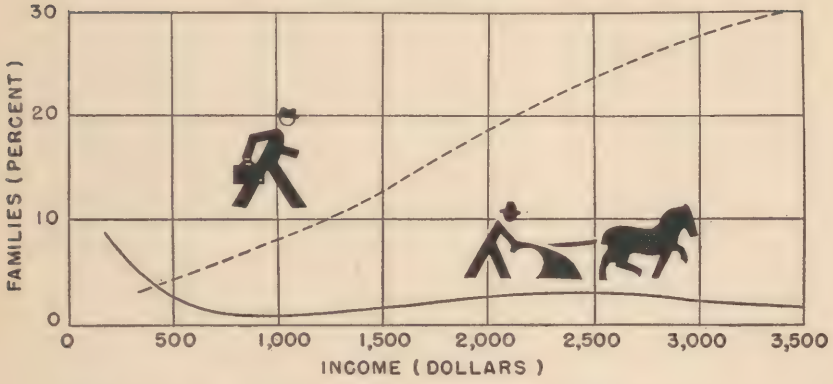


Figure 3. Urban families – – – – – Farm families ————

FSA MEDICAL PROGRAM ACCOUNTS FOR HIGH RURAL PERCENTAGE IN LOW INCOME GROUP. (U.S.D.A. APRIL, 1944.)